

# BUDGET & ECONOMIC FORECAST

## NOVEMBER 2015



MINNESOTA Management & Budget  
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### **Statutory Provisions**

In accordance with Minnesota Statutes, section 16A.103, subdivision 1, the commissioner of Minnesota Management and Budget (MMB) must prepare a forecast of state revenue and expenditures in February and November of each year. This forecast must assume the continuation of current laws and reasonable estimates of projected growth in the national and state economies and affected populations.

Revenue must be estimated for all sources provided for in current law. Expenditures must be estimated for all obligations imposed by law and those projected to occur as a result of variables outside the control of the legislature. Expenditure estimates must not include an allowance for inflation.

A forecast prepared during the first fiscal year of a biennium must cover that biennium and the next biennium. A forecast prepared during the second fiscal year of a biennium must cover that biennium as well as the next two biennium.

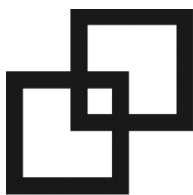
### **Notes**

Numbers in the text and tables may not add to the totals due to rounding.

Unless otherwise noted, years used to describe the budget outlook are state fiscal years (FY), from July 1 to June 30, and years used to describe the economic outlook are calendar years (CY).

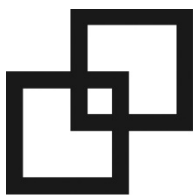
Supplemental budget and economic forecast material is available on MMB's website ([mn.gov/mmb](http://mn.gov/mmb)).

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## EXECUTIVE SUMMARY

Minnesota's budget outlook has improved from previous estimates despite a weaker economic outlook. Minnesota Management & Budget (MMB) estimates that revenues will be \$42.718 billion in FY 2016-17, a \$90 million (0.2 percent) increase over end of session estimates. Higher expected general sales and corporate franchise taxes offset a lower income tax forecast. Current law spending is forecast to be \$41.656 billion in the current biennium, or \$249 million (0.6 percent) lower than previous projections. Estimated spending for human services is lowered by \$416 million, while spending for E-12 and other areas has increased. In addition to these changes, the FY 2015 closing balance provides \$682 million of additional resources in the FY 2016-17 biennium. This brings the forecast balance to \$1.871 billion, up from \$865 million at the end of session. Current law allocates the first \$71 million of the balance to repay the environmental funds, and 33 percent of the remaining forecast balance – \$594 million – to the budget reserve. This leaves a projected budgetary balance of \$1.206 billion for the current biennium.

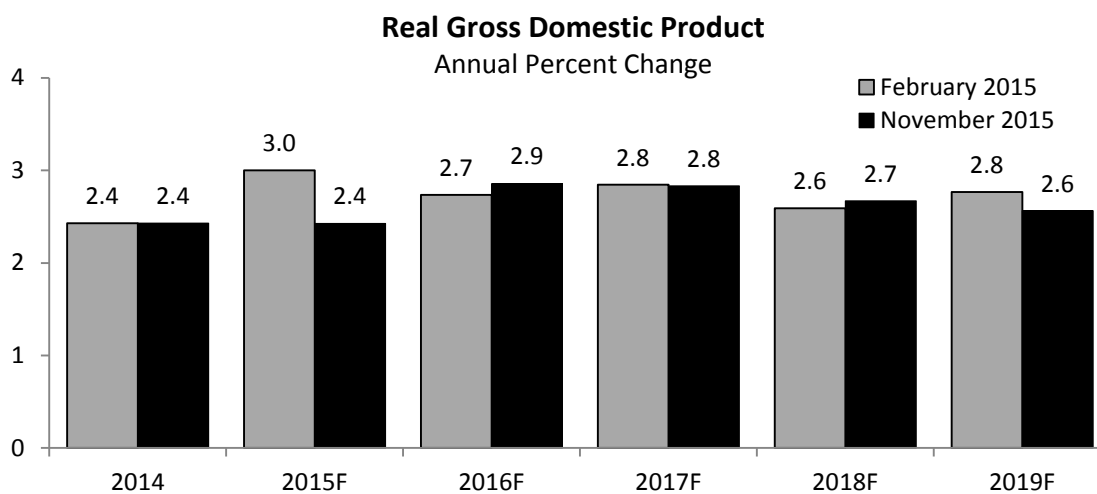
**U.S. Economic Outlook.** The outlook for U.S. economic growth has weakened since Minnesota's *Budget and Economic Forecast* was last prepared in February 2015. The economy got off to another slow start at the beginning of the year as severe winter weather conditions took a bite out of home and auto sales. Slower oil drilling activity in the wake of falling crude prices hit capital investment among domestic energy producers harder and faster than expected. Finally, the weak global economy and stronger U.S. dollar have cut into net trade. The resulting drop in import prices and export demand, combined with a turn in the inventory cycle, has led to a pullback in domestic manufacturing. These factors are restraining overall economic activity this year.

Nonetheless, the U.S. economy is weathering the adverse effects of the strengthening dollar and lower oil prices reasonably well. Overall economic growth has been bumpy, but underlying domestic activity is strong. U.S. aggregate demand, as measured by real final sales to domestic purchasers—GDP excluding inventories and trade—is rising at a consistently healthy 3 percent annual pace, much better than the 2 percent average gain since the recession ended in 2009. And while the strong dollar remains a formidable headwind for capital investment that is likely to persist well into next year, the roller coaster of oil prices is steadying near seven-year lows. This means big savings for consumers, who are already spending with some gusto. Responding to improving demand for goods and services, employers are hiring, which is quickly absorbing remaining labor market slack. The economy has added nearly 3 million jobs in the past year, some of the strongest growth since the late 1990s. The number of available jobs across the country

has surged to unprecedented levels and the U.S. jobless rate is down to 5.0 percent in October. A fast-tightening labor market closer to full employment should translate into improvements in household formation and labor force growth, and put upward pressure on productivity and wages, further boosting consumer demand in 2016.

Still, there are concerns. To forestall inflationary pressures, the Federal Reserve is expected to soon begin normalizing short-term interest rates from their near-zero level, even as most other major central banks are still easing monetary policy. As a result, the already strong dollar could rise even further as higher rates attract more foreign investment to the U.S. Already, the trade-weighted dollar has risen more than 20 percent against major trading partners since mid-2014. Should the dollar keep pushing higher, American goods will grow more expensive abroad and the cost of foreign goods for U.S. consumers and businesses will fall further. Both put added pressure on domestic producers with foreign sales.

The Fed is also preparing to dial back years of extraordinary monetary stimulus, meant to lower long-term interest rates—or the real cost of borrowing. All else equal, lower long-term interest rates tend to raise asset-prices—like stocks, bonds, and houses—and can lead to excessive risk-taking and inflated valuations. The coming Fed rate hikes are widely anticipated by markets, and expectations are that the pace will be gradual and cautious. However, the risk of higher long-term interest rates leading to unanticipated degrees of asset devaluation remains, and the path to normalized rates may be uneven.



Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

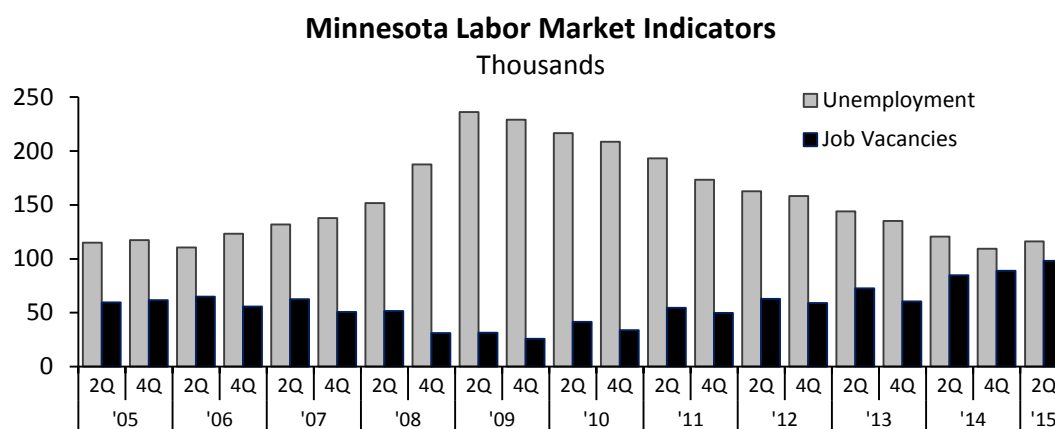
*The outlook for U.S. economic growth has weakened since Minnesota's Budget and Economic Forecast was last prepared in February 2015.*

IHS Economics (IHS), Minnesota's macroeconomic consultant, has lowered their overall U.S. growth expectations for 2015 to 2017. The IHS November 2015 baseline forecast calls for annual real GDP growth to pick up from 2.4 percent in 2015, to 2.9 percent in 2016 and 2.8 percent in 2017. The February 2015 baseline forecast expected somewhat stronger overall growth of 3.0 percent in 2015, followed by increases of 2.7 percent in 2016 and 2.8 percent in 2017. The IHS November baseline calls for slightly stronger

growth than the Blue Chip Consensus, the median of 50 business and academic forecasts. The Blue Chip forecast is for 2.4 percent growth this year, followed by an increase of 2.6 percent in 2016. In October, Blue Chip's long-range consensus forecast for 2017 was 2.5 percent.

There are several key dependencies to the IHS November economic outlook. First, stronger labor market conditions must begin to translate into improvements in household formation and labor force growth. Higher household formation rates boost housing demand, and labor force growth is an important component of potential economic growth. Second, productivity growth must rebound to longer term trends, bringing higher living standards and stronger potential economic growth. Third, the Federal Reserve's actions to normalize monetary policy later this year and next must go smoothly. In the November 2015 baseline, IHS assumes that the Fed begins to raise the federal funds rate later this month, in December 2015. Fourth, an omnibus spending bill to appropriate the parameters set by October's Bipartisan Budget Act of 2015 must become law by December 11. A federal government shutdown is still a remote possibility if there are significant disputes during this process. Finally, international economic and political risk must not cause undue damage. Events in the Middle East, uncertainty over the outlook in China, as well as the weak economies in Europe and Japan, heighten the forecast risk from the international trade sector.

**Minnesota Economic Outlook.** Minnesota's labor market performance has been impressive since the recession ended over six years ago. The state has added more than 50,000 jobs since employment surpassed its pre-recession peak in mid-2013, and most indicators suggest the labor market continues to tighten considerably. The number of job vacancies in Minnesota has soared to the highest level since 2001, and the state's jobless rate was down to 3.7 percent in October, matching the low that has prevailed since mid-2014. With the excess supply of workers rapidly diminishing, a tighter labor market is leading to some long-awaited wage acceleration. It increasingly appears that Minnesota is near its full employment potential.



Source: Minnesota Department of Employment and Economic Development (DEED)

*Minnesota's labor market performance has been impressive since the recession ended. It increasingly appears that Minnesota is near its full employment potential.*

Nonetheless, Minnesota's economy faces challenges. Manufacturing, mining, and agricultural activity in the state has struggled in 2015, as Minnesota producers adjust to lower commodity prices, the strong dollar, and weak global growth. The pace of the state's housing recovery has been slow in part due to persistently slow household formation, although there are recent signs of improvement. Moreover, Minnesota's labor force growth remains weak, despite the fast-tightening job market. This is impeding the state's ability to increase employment. MMB's economic forecast depends on stronger labor market conditions beginning to translate into improvements in household formation, the supply of labor, and productivity, thereby putting further upward pressure on hourly wage growth.

**Budget Outlook: Closed Biennium.** The FY 2014-15 biennium closed in a favorable position compared to prior expectations. The February 2015 forecast projected a \$476 million balance available for FY 2014-15. Budget changes enacted in the 2015 regular and special legislative sessions, including a \$455 million transfer to the health care access fund, reduced the balance to a projected \$47 million.

**Closed Biennium: FY 2014-15 General Fund Budget**  
End-of-Session vs. Actual Comparison

| (\$ in millions)               | End-of-Session | Actual         | \$<br>Change | %<br>Change |
|--------------------------------|----------------|----------------|--------------|-------------|
| <b>Beginning Balance</b>       | <b>\$1,712</b> | <b>\$1,712</b> | <b>\$ -</b>  | <b>0.0%</b> |
| Revenues                       | 39,468         | 40,032         | 564          | 1.4         |
| Expenditures                   | 39,759         | 39,641         | (118)        | (0.3)       |
| <b>Balance Before Reserves</b> | <b>1,421</b>   | <b>2,103</b>   | <b>682</b>   |             |
| Cash Flow & Budget Reserves    | 1,344          | 1,344          | -            |             |
| Stadium Reserve                | 30             | 33             | 3            |             |
| Appropriations Carried Forward | -              | 94             | 94           |             |
| <b>Budgetary Balance</b>       | <b>\$47</b>    | <b>\$632</b>   | <b>\$585</b> |             |

This forecast now reflects actual revenue and expenditure data for FY 2015. Final FY 2014-15 revenues were \$40.032 billion, up \$564 million (1.4 percent) from end of session estimates. Actual spending was \$39.641 billion, \$118 million (0.3 percent) lower than prior estimates. This leaves \$682 million that is available in the current biennium.

**Budget Outlook: Current Biennium.** Minnesota's budget outlook for the current biennium has improved since last February's forecast. The February 2015 forecast projected a \$1.867 billion balance for FY 2016-17 before the legislature took action on the budget for the current biennium. The enacted budget included spending and revenue changes that reduced the balance to \$865 million.

Resources in the current biennium have been increased by the \$682 million gain to the closing balance in the previous biennium that carried forward into the current biennium. Revenues are expected to be \$90 million (0.2 percent) more than end of session estimates while expenditures are now projected to be \$249 million (0.6 percent) lower. A statutory



deposit to the budget reserve adds \$8 million to this account while higher gambling revenues increase the projected stadium reserve balance by \$6 million. These changes generate a forecast balance of \$1.871 billion, an improvement of \$1.006 billion since end of session.

However, there are several automatic allocations of the forecast balance in statute. Minnesota Statutes 16A.152, which governs general fund reserves, directs MMB to allocate any positive forecast balance first to two environmental funds, and then to the budget reserve. The first allocation in this forecast is \$63 million to the closed landfill investment fund and \$8 million to metropolitan landfill contingency action trust account.

The second allocation in this forecast is 33 percent of the remaining balance, or \$594 million, to the general fund budget reserve account. Statute directs MMB to allocate up to 33 percent until the recommended level is reached. The recommended level is established by an annual evaluation of the adequacy of the budget reserve based on general fund revenue volatility. The current report, released by MMB in September 2015 recommends a budget reserve policy of 4.8 percent of general fund non-dedicated revenue, or \$2.032 billion for the current FY 2016-17 biennium. This allocation brings the budget reserve balance to \$1.597 billion—or 3.8 percent of FY 2016-17 non-dedicated revenues.

After these allocations, the available general fund budgetary balance is now \$1.206 billion, \$341 million higher than end of session estimates.

### Current Biennium: FY 2016-17 General Fund Budget

End-of-Session vs. November 2015 Forecast Comparison

| (\$ in millions)                  | End-of-Session | November 2015<br>Forecast | \$<br>Change   | %<br>Change |
|-----------------------------------|----------------|---------------------------|----------------|-------------|
| <b>Beginning Balance</b>          | <b>\$1,421</b> | <b>\$2,103</b>            | <b>\$682</b>   | 48.0%       |
| Revenues                          | 42,629         | 42,718                    | 90             | 0.2         |
| Expenditures                      | 41,834         | 41,585                    | (249)          | (0.6)       |
| Cash Flow & Budget Reserve        | 1,344          | 1,352                     | 8              | 6.0         |
| Stadium Reserve                   | 7              | 13                        | 6              | 85.7        |
| <b>Forecast Balance</b>           | <b>\$865</b>   | <b>\$1,871</b>            | <b>\$1,006</b> |             |
| Allocation to Environmental Funds | -              | 71                        | 71             |             |
| Transfer to Budget Reserve        | -              | 594                       | 594            |             |
| <b>Budgetary Balance</b>          | <b>\$865</b>   | <b>\$1,206</b>            | <b>\$341</b>   |             |

*Revenues* Total general fund revenues for FY 2016-17 are now forecast to be \$42.718 billion, \$90 million (0.2 percent) more than the February forecast adjusted for law changes. Total tax revenues for the biennium are forecast to be \$40.905 billion, exceeding the prior estimate by \$102 million (0.2 percent). Higher expected general sales, corporate, and other taxes more than offset a decline in forecast individual income tax revenues.

Individual income tax receipts are now forecast to be \$110 million (0.5 percent) less than the prior estimate. Lower forecast growth in both wage and non-wage income in each year from 2015 to 2017 offsets MMB's increased estimate of tax liability for 2014, the base year for this income tax forecast.

Among the major tax types, the sales tax shows the largest dollar amount increase over the prior estimate, \$91 million (0.8 percent). This change reflects higher than expected sales tax receipts in FY 2015, which forms the base of this forecast, and stronger projected taxable sales growth in 2017. Higher expected gross sales tax receipts and lower expected refunds both contribute to the net forecast change.

A reduced corporate refund forecast together with higher expected gross tax payments raise expected net corporate tax revenues for FY 2016-17 by \$69 million (2.7 percent) above the prior estimate.

Other tax revenue is now expected to exceed the prior estimate by \$62 million (1.8 percent). Among other taxes, the cigarette and tobacco tax shows the largest dollar amount change, and increase of \$67 million (5.6 percent). Revenue from the occupation tax is now expected to be \$31 million (90.9 percent) lower than the prior estimate.

#### Current Biennium: FY 2016-17 General Fund Revenues

Change From End-of-Session Estimates

| (\$ in millions)              | November 2015<br>Forecast | \$<br>Change | %<br>Change |
|-------------------------------|---------------------------|--------------|-------------|
| Individual Income Tax         | \$21,957                  | \$(110)      | (0.5)%      |
| General Sales Tax             | 11,031                    | 91           | 0.8         |
| Corporate Franchise Tax       | 2,644                     | 69           | 2.7         |
| State General Property Tax    | 1,689                     | (9)          | (0.5)       |
| Other Tax Revenue             | 3,584                     | 62           | 1.8         |
| <b>Subtotal – Tax Revenue</b> | <b>\$40,905</b>           | <b>\$102</b> | <b>0.3%</b> |
| Non-Tax Revenues              | 1,423                     | (0)          | (0.0)       |
| Other Resources               | 388                       | (12)         | (3.1)       |
| <b>Total Revenue</b>          | <b>\$42,718</b>           | <b>\$90</b>  | <b>0.2%</b> |

*Expenditures.* Total spending in the current biennium is now forecast to be \$41.656 billion, \$178 million (0.4 percent) lower than end of session estimates.

A significant decrease in the health and human services (HHS) forecast drives the overall spending reduction; projected HHS spending is \$416 million lower (3.3 percent) than prior estimates. Lower rates paid to managed care organizations through the Medical Assistance program is the primary driver of the HHS reduction. The forecast for debt service is also down \$27 million (2.1 percent) due to favorable bond market conditions.

Partially offsetting the overall spending reduction are increases in other areas of the state budget. The E-12 education forecast is \$73 million (0.4 percent) higher than prior estimates. Appropriations that have special legal authority to carry forward from the

previous biennium now are forecast to be spent in FY 2016, accounting for \$94 million in spending increases. Finally, conditional general fund transfer provisions that were enacted into law in the 2015 regular and special legislative sessions increase spending by \$22 million (included in the “All Other” line in the table below), prompted by the higher FY 2015 closing balance, and \$71 million triggered by the positive FY 2016-17 forecast balance.

### Current Biennium: FY 2016-17 General Fund Expenditures

Change From End-of-Session

| (\$ in millions)                                  | November 2015<br>Forecast | \$<br>Change   | %<br>Change   |
|---|---------------------------|----------------|---------------|
| E-12 Education                                    | \$17,309                  | \$73           | 0.4%          |
| Property Tax Aids & Credits                       | 3,358                     | 6              | 0.2           |
| Health & Human Services                           | 12,064                    | (416)          | (3.3)         |
| Debt Service                                      | 1,241                     | (27)           | (2.1)         |
| All Other   | 7,612                     | 115            | 1.5           |
| <b>Total Expenditures</b>                         | <b>\$41,585</b>           | <b>\$(249)</b> | <b>(0.6)%</b> |
| Environmental Fund Allocations                    | 71                        | 71             | -             |
| <b>Total Expenditures<br/>(After Allocations)</b> | <b>\$41,656</b>           | <b>\$(178)</b> | <b>(0.4)%</b> |

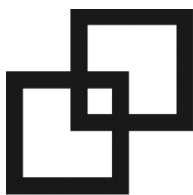
**Budget Outlook: Planning Estimates.** The FY 2018-19 long term planning outlook remains strong. The planning estimates display structural balance – excluding reserves and any balance forecast for the current biennium. Revenue growth outpacing spending growth into the next biennium leaves a structural balance of \$2.046 billion, an improvement of \$984 million over the structural balance in the current biennium. The majority of expenditure projections do not include an adjustment for projected inflation. Inflation, based on the Consumer Price Index (CPI), is expected to be 2.6 percent in FY 2018 and 2.3 percent in FY 2019.

The FY 2018-19 planning estimates are not intended to predict surpluses or deficits several years into the future. Instead, they provide an important baseline against which the longer-term impacts and affordability of budget decisions in the 2016 legislative session can be measured.

### Planning Estimates: November 2015 Forecast Biennial Growth

FY 2016-17 vs. FY2018-19 Biennial Comparison

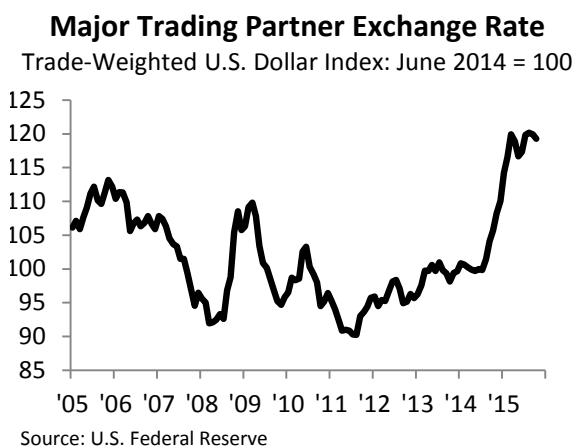
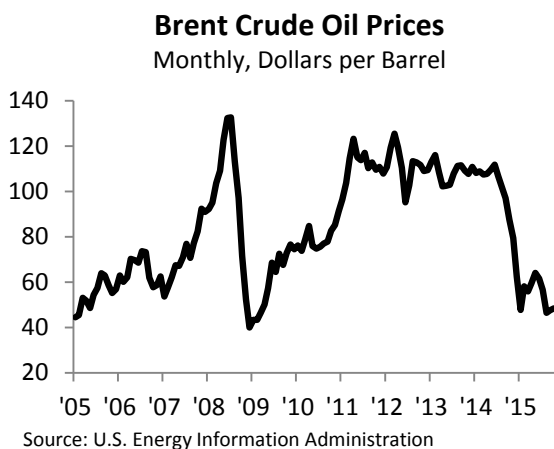
| (\$ in millions)   | FY 2016-17     | FY 2018-19     | \$<br>Change | Annualized<br>%<br>Change |
|--|----------------|----------------|--------------|---------------------------|
| Forecast Revenues  | \$42,718       | \$46,603       | \$3,884      | 4.4%                      |
| Projected Spending   | 41,656         | 44,557         | 2,901        | 3.4                       |
| <b>Structural Balance</b>  | <b>\$1,062</b> | <b>\$2,046</b> | <b>\$984</b> |                           |
| <i>Estimated Inflation (CPI)<br/>Applied to Projected Spending</i> | <i>N/A</i>     | <i>\$1,694</i> |              |                           |



## ECONOMIC OUTLOOK

### U.S. Economic Outlook

The outlook for U.S. economic growth has weakened since Minnesota's *Budget and Economic Forecast* was last prepared in February 2015. The economy got off to another slow start at the beginning of the year as severe winter weather conditions took a bite out of home and auto sales. Slower oil drilling activity in the wake of falling crude prices hit capital investment among domestic energy producers harder and faster than expected. Finally, the weak global economy and stronger U.S. dollar have cut into net trade. The resulting drop in import prices and export demand, combined with a turn in the inventory cycle, has led to a pullback in domestic manufacturing. These factors are restraining overall economic activity this year.



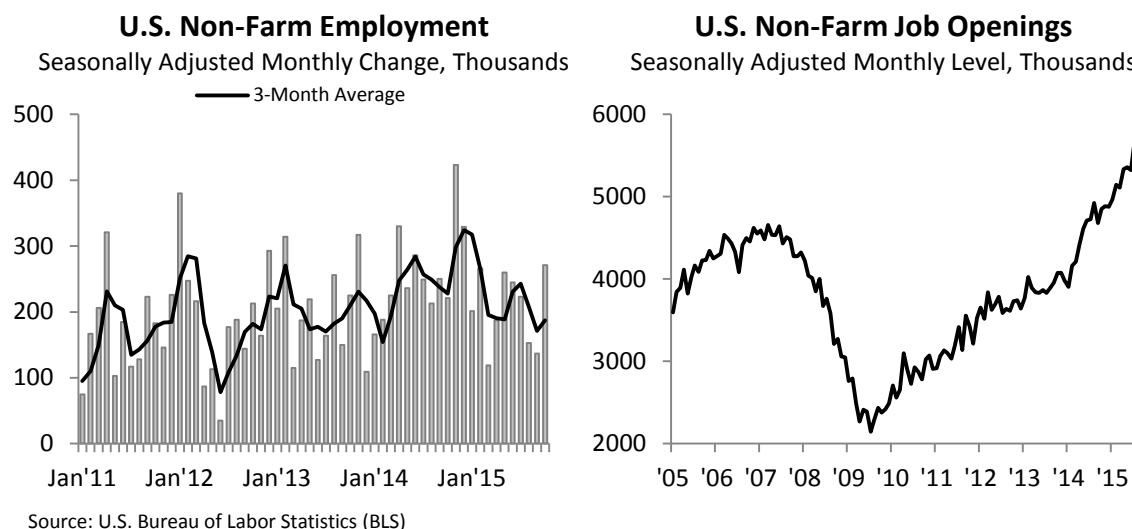
*The combination of lower oil prices and a stronger dollar are reshaping overall economic activity this year. Nonetheless, the U.S. economy is weathering the adverse effects of these transitory influences reasonably well.*

Nonetheless, the U.S. economy is weathering the adverse effects of transitory influences—the strengthening dollar and lower oil prices—reasonably well. Overall economic growth has been bumpy, but underlying domestic activity is strong. U.S. aggregate demand, as measured by real final sales to domestic purchasers—GDP excluding inventories and trade—is rising at a consistently healthy 3 percent annual pace, much better than the 2 percent average gain since the recession ended in 2009. And while the strong dollar remains a formidable headwind that is likely to persist well into next year, the roller coaster of oil prices is steadying near seven-year lows. This means big

savings for consumers, who are already spending with some gusto. Improving demand is quickly absorbing remaining labor market slack. The economy has added nearly 3 million jobs in the past year, some of the strongest growth since the late 1990s. The number of available jobs across the country has surged to unprecedented levels and the U.S. jobless rate is down to 5.0 percent in October. A fast-tightening labor market closer to full employment should translate into improvements in household formation and labor force growth, and put upward pressure on productivity and wages, further boosting consumer demand in 2016.

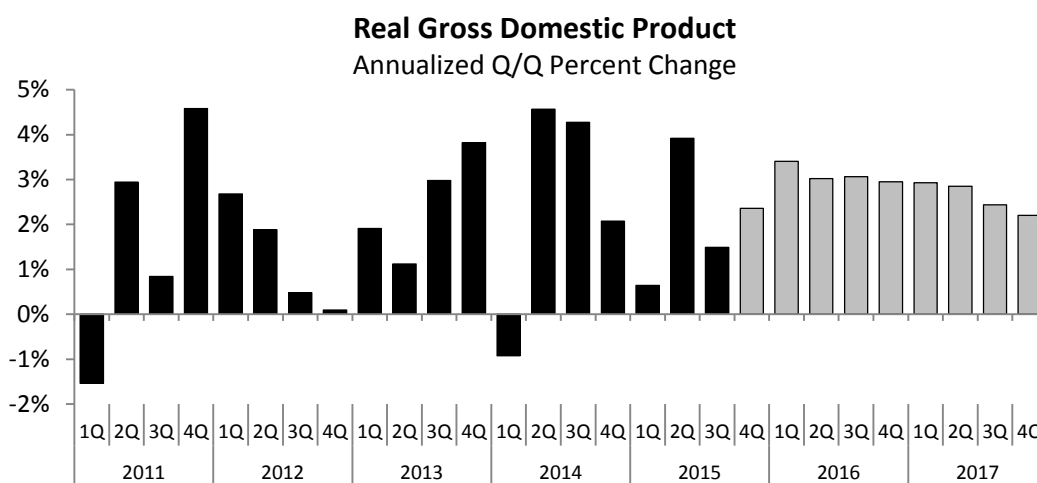
Still, there are concerns. To forestall inflationary pressures, the Federal Reserve is expected to soon begin normalizing short-term interest rates from their near-zero level, even as most other major central banks are still easing monetary policy. As a result, the already strong dollar could rise even further as higher rates attract more foreign investment to the U.S. Already, the trade-weighted dollar has surged more than 20 percent against major trading partners since mid-2014. Should the dollar keep pushing higher, American goods will grow more expensive abroad and the cost of foreign goods for U.S. consumers and businesses will fall further. Both put added pressure on domestic producers with foreign sales.

The Fed is also preparing to dial back years of extraordinary monetary stimulus, meant to lower long-term interest rates—or the real cost of borrowing. All else equal, lower long-term interest rates tend to raise asset-prices—like stocks, bonds, and houses—and can lead to excessive risk-taking and inflated valuations. The coming Fed rate hikes are widely anticipated by markets, and expectations are that the pace will be gradual and cautious. However, the risk of higher long-term interest rates leading to unanticipated degrees of asset devaluation remains, and the path to normalized rates may be uneven.



*Underlying economic activity is strong. The economy has added nearly 3 million jobs in the past year, some of the strongest growth since the late 1990s, and the number of available jobs across the country has surged to unprecedented levels.*

**Last Quarter GDP and the Year Ahead.** The ongoing pattern of jagged top-line growth and solid underlying growth continued in the third quarter of 2015. As expected, a sizeable inventory correction and foreign trade dragged down annualized real GDP growth to a revised 2.1 percent, from 3.9 percent in the second quarter, according to the Bureau of Economic Analysis' (BEA) second estimate. Broad-based consumer spending across all major categories was the main driver, contributing 2.1 percentage points to third quarter growth. Fixed investment and state and local government spending also made modest positive contributions. Inventories and trade were the main drags, reducing GDP growth by 0.6 and 0.2 percentage points, respectively. Therefore, the subpar top-line number in the third quarter should not be mistaken for sluggish underlying growth. In fact, real final sales to domestic purchasers, which excludes inventories and trade, rose a solid 2.9 percent, following a similar increase of 3.7 percent in the second quarter.

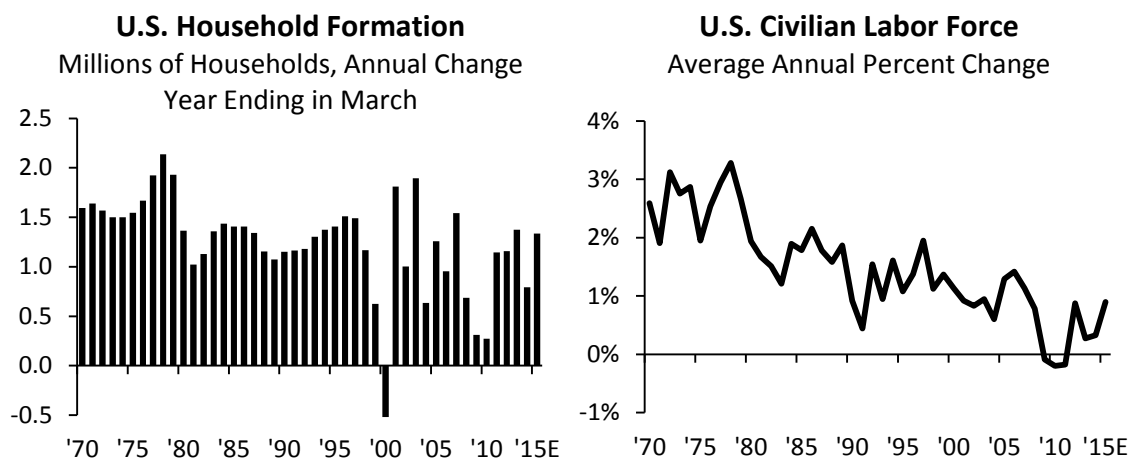


Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

*The ongoing pattern of jagged top-line growth continued in the third quarter of 2015. As expected, a sizeable inventory correction and the lack of support from foreign trade dragged down real GDP growth to 1.5 percent, from 3.9 percent in the second quarter.*

Moving into the current and next quarters, Minnesota Management and Budget's macroeconomic consultant, IHS Economics (IHS), believes the evident strength of final domestic demand will be lasting, and that the inventory cycle will begin to ease, supporting the case for an acceleration of overall economic growth. Real GDP growth in the fourth quarter of this year and the first quarter of next year are expected to accelerate to 2.4 percent and 3.4 percent, respectively. That improvement continues through at least early 2017, with more modest gains in labor supply and productivity. The IHS November 2015 baseline forecast calls for annual real GDP growth to pick up from 2.4 percent in 2015, to 2.9 percent in 2016 and 2.8 percent in 2017. The February 2015 baseline forecast expected somewhat stronger overall growth of 3.0 percent in 2015, followed by increases of 2.7 percent in 2016 and 2.8 percent in 2017. The IHS November baseline calls for slightly stronger growth than the Blue Chip Consensus, the median of 50 business and academic forecasts. The Blue Chip forecast is for 2.4 percent growth this year, followed by an increase of 2.6 percent in 2016. In October, Blue Chip's long-range consensus forecast for 2017 was 2.5 percent.

Inflation is following an expected lower path this year, as lower-priced gasoline, industrial commodities, and imported consumer goods have put further downward pressure on already low inflation. The IHS November 2015 baseline anticipates consumer prices (CPI) in 2015 to be flat—or 0.0 percent inflation. The February 2015 baseline projected a decline of 0.7 percent in 2015. IHS continues to believe downward inflation pressures are transitory and will correct in the near-term. Thus inflation is expected to gradually move higher. The November baseline has CPI rising 1.4 percent in 2016 and 2.7 percent in 2017, similar to the 2.3 and 2.7 percent growth expected last February.



Source: U.S. Census Bureau; IHS Economics (IHS)

Source: U.S. Bureau of Labor Statistics (BLS)

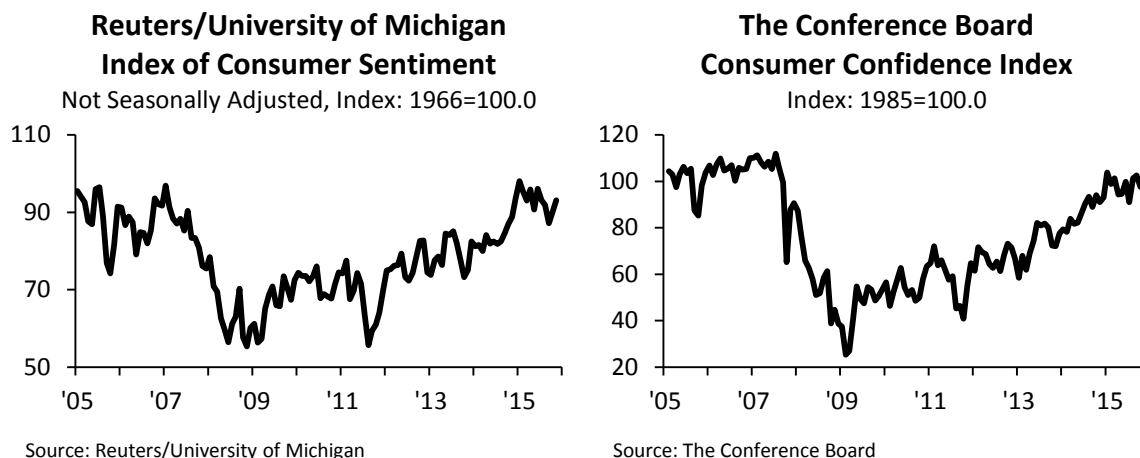
*A fast-tightening labor market closer to full employment should translate into improvements in household formation and labor force growth, and put upward pressure on productivity and wages, further boosting consumer demand in 2016.*

**Forecast Risks.** There are several key dependencies to the IHS November economic outlook. First, stronger labor market conditions must begin to translate into improvements in household formation and labor force growth. Higher household formation rates boost housing demand, and labor force growth is an important component of potential economic growth. Second, productivity growth must rebound to longer term trends, bringing higher living standards and stronger potential economic growth. Third, the Federal Reserve's actions to normalize monetary policy later this year and next must go smoothly. In the November 2015 baseline, IHS assumes that the Fed begins to raise the federal funds rate later this month, in December 2015. Fourth, an omnibus spending bill to appropriate the parameters set by October's Bipartisan Budget Act of 2015 must become law by December 11. A federal government shutdown is still a remote possibility if there are significant disputes during this process. Finally, international economic and political risk must not cause undue damage. Events in the Middle East, uncertainty over the outlook in China, as well as the weak economies in Europe and Japan, heighten the forecast risk from the international trade sector.

IHS assigns a probability of 65 percent to the November baseline forecast. A more pessimistic scenario in which the recent stabilization of global equity markets turns out to be only a temporary respite from a major stock market correction is assigned a

probability of 20 percent. A more optimistic scenario where higher-than-expected household formation, productivity, and foreign growth deliver a boost to the U.S. economy in early 2016 is assigned probability of 15 percent.

**Consumer Spending.** Solid economic fundamentals for the consumer are fueling ramped up spending growth. Debt service burdens have fallen dramatically. The wealth of American households has climbed to new peaks, bolstered by rising real-estate values and stock prices. Average U.S. gasoline prices are about 25 percent lower than this time last year. And the job market continues to improve, which has helped further boost consumer confidence this year. Separate measures released by the Conference Board and Reuters/University of Michigan show that confidence among U.S. consumers remains well above that in previous years, and is still near post-recession highs. These factors highlight consumer spending growth that has accelerated with some gusto since mid-2014. Looking ahead, the key to lasting gains will be stronger wage growth.

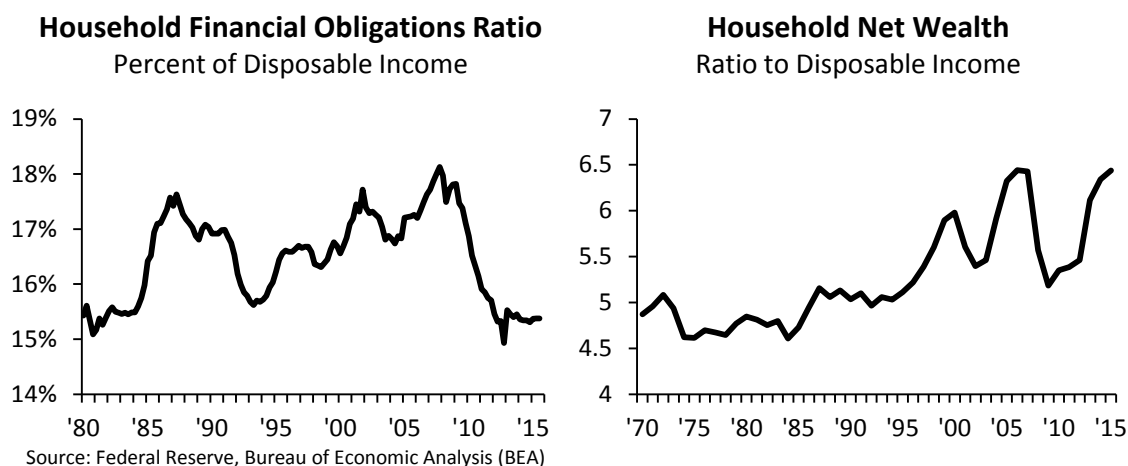


*Separate measures released by Reuters/University of Michigan and the Conference Board show that confidence among U.S. consumers remains well above that in previous years, and is still near post-recession highs.*

Households have deleveraged, but are showing increased willingness to take on more credit card debt. The Federal Reserve's financial obligations ratio, which measures the share of monthly household financial commitments to disposable income, is at the lowest level since the early 1980s. And the household debt service ratio, the share of total required household debt payments to disposable income, has never been lower in 35 years of available data. Credit is now also flowing more freely. Until recently, consumers were taking on more non-mortgage debt, mainly in the form of lower-interest big-ticket items such as auto and student loans, but had been reluctant to build bigger credit-card balances for smaller discretionary purchases. That appears to be changing. The Federal Reserve reports that revolving credit outstanding, mostly department store charge cards and credit cards, has shot up this year to the highest levels since late 2009. Normal credit and retail card lending appears to be back, and is expected to support consumer spending in 2016.



Household wealth is climbing amid rising home values and stock prices. The Federal Reserve's flow of funds report shows that household net worth – the value of assets such as homes, bank accounts and stocks, minus debts such as mortgages and credit cards—has surged close to a record 6.4 times household disposable income, thanks in part to strong gains in the value of real estate and equity assets. National house prices are now back to what they were before nationwide home values began to unravel in early 2007, according to the Federal Housing Finance Agency purchase-only home price index. And the Dow Jones industrial average and S&P 500 set all-time highs in the spring of this year. Looking forward, the improving economy is expected to continue to support asset prices. Gains in wealth will have a positive impact on spending growth.

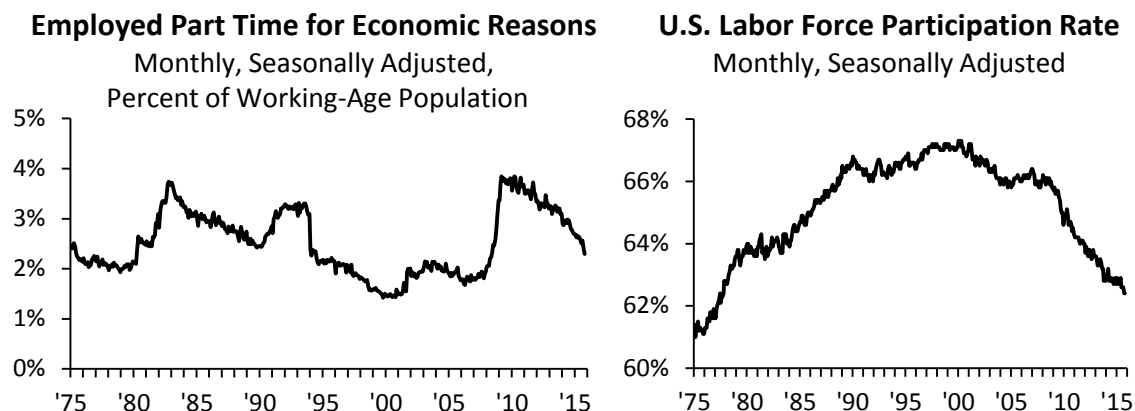


*Debt service burdens have fallen dramatically, and the wealth of American households has climbed to new peaks, bolstered by rising real-estate values and stock prices.*

Cheap gas, thanks to a tumble in oil prices, has meant big savings for U.S. consumers. The average price for a gallon of gasoline was just \$2.28 in mid-November, down 70 cents from a year earlier and \$1.50 since June 2014, according to the U.S. Energy Information Administration. Lower gas prices are comparable to a tax cut, freeing up disposable income for spending on non-gasoline goods and services. With average oil prices of just \$54 per barrel this year, U.S. households are now expected to save about \$100 billion on gasoline bills in 2015. This is equal to about 0.7 percent of disposable income.

The labor market continues to make steady progress. The U.S. economy is on track to create a robust 2.5 million jobs this year, about the same gain as in the past three years and more than enough to keep pace with the growing labor force. Consistently strong job gains have helped quickly absorb the unemployed and underemployed and push down the U.S. unemployment rate to a new post-recession low of 5.0 percent in October. In the past year, unemployment has fallen across age, gender, educational, and racial cohorts, and the number of long-term unemployed has declined sharply. However, the rate of involuntary part-time employment remains elevated, and the labor force participation rate remains very weak. The U.S. labor force participation rate has fallen steadily since the end of the recession and is now as low as it was in the mid-to-late 1970s. Wage growth

also remains modest despite solid job growth and a tightening job market. Year-over-year growth in the employment cost index, a broad measure of nominal wage and benefits compensation, was 1.9 percent in the third quarter of 2015, near the average annual growth since the recession ended more than six years ago. The increase in average hourly earnings has also been sluggish.



Source: U.S. Bureau of Labor Statistics (BLS)

*In the past year, U.S. unemployment has fallen across age, gender, educational, and racial cohorts, and the number of long-term unemployed has declined sharply. However, the rate of involuntary part-time employment remains elevated, and the labor force participation rate remains very weak.*

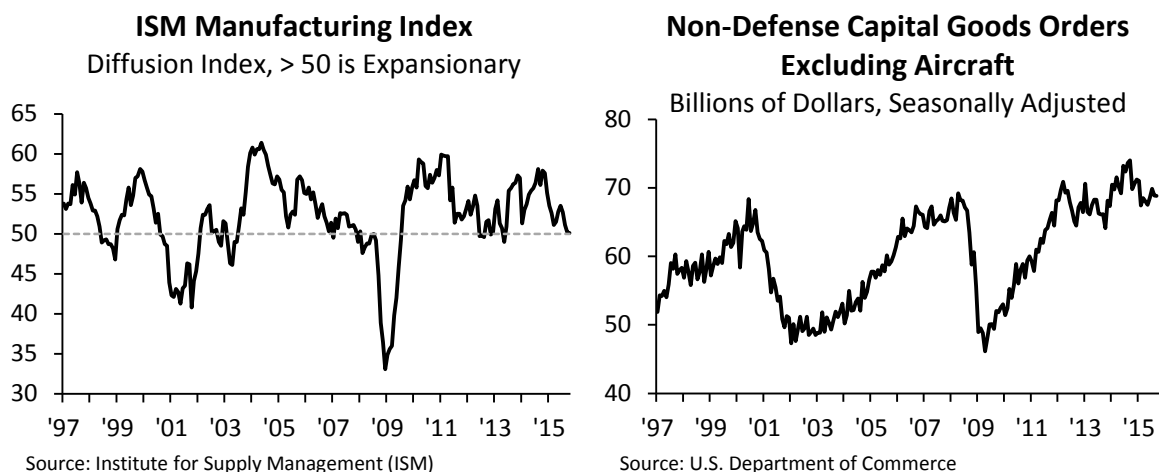
Ongoing slack in the labor market and the weak pace of wage growth have been the biggest constraints on consumer demand during the recovery. But strong job gains, a boost in confidence, and redirected spending from lower gas prices have revived spending in the past 18 months. Real consumer spending has grown at a consistent annualized pace of more than 3 percent since mid-2014, well above the 2.3 percent average rate since early 2010. IHS believes consumer spending will remain strong as wage growth gains traction. Job growth is expected to cool somewhat over the next two years as productivity gains increasingly substitute for additional labor. Faster labor-force growth will also slow the decline in the unemployment rate. Nevertheless, labor market conditions tighten further toward full employment, putting upward pressure on wage growth. Total compensation per worker is forecast to accelerate from 2.1 percent in 2015, to 2.3 percent in 2016 and 3.1 percent in 2017. With wages picking up, real consumer spending growth is expected to hold steady at a solid 3.2 percent in 2016 and 3.1 percent in 2017, led by autos and other big-ticket durable items.

**Industrial Production.** Manufacturing activity has struggled in 2015, as U.S. producers adjust to the stronger dollar, weakness abroad, lower energy prices, and business' efforts to work off a sizeable inventory glut in the second half of the year. Recent survey results from the Institute of Supply Management (ISM) signal that the U.S. manufacturing sector is expanding at its slowest pace in more than two years, as production, new orders, inventories, supplier deliveries, and hiring have all waned since the beginning of the year.

Perhaps most notable, the new export orders component of ISM's report has been in contractionary territory since last spring.

Other measures of factory conditions reflect the same softening conditions as in ISM's manufacturing survey. The Federal Reserve's manufacturing output index has expanded at just a 1.4 percent average annual pace during the first 10 months of 2015, down from a 3.9 percent average rate in 2014. Likewise, the Commerce Department reports that new orders for U.S. factory goods have decreased in 11 of the past 14 months. Core capital goods orders—nondefense capital goods excluding aircraft—a leading indicator for future capital expenditure growth, are down 4.0 percent thus far in 2015 from a year earlier, suggesting firms are still hesitant to invest in their operations.

IHS believes further inventory cooling and more drag from foreign trade due to the strong dollar will keep manufacturing growth restrained into 2016. Nonetheless, the large drag from inventories is expected to abate in the early part of the year, and manufacturing output is projected to reaccelerate from an estimated 1.8 percent annual growth in 2015, to 2.2 and 3.1 percent in 2016 and 2017, respectively.



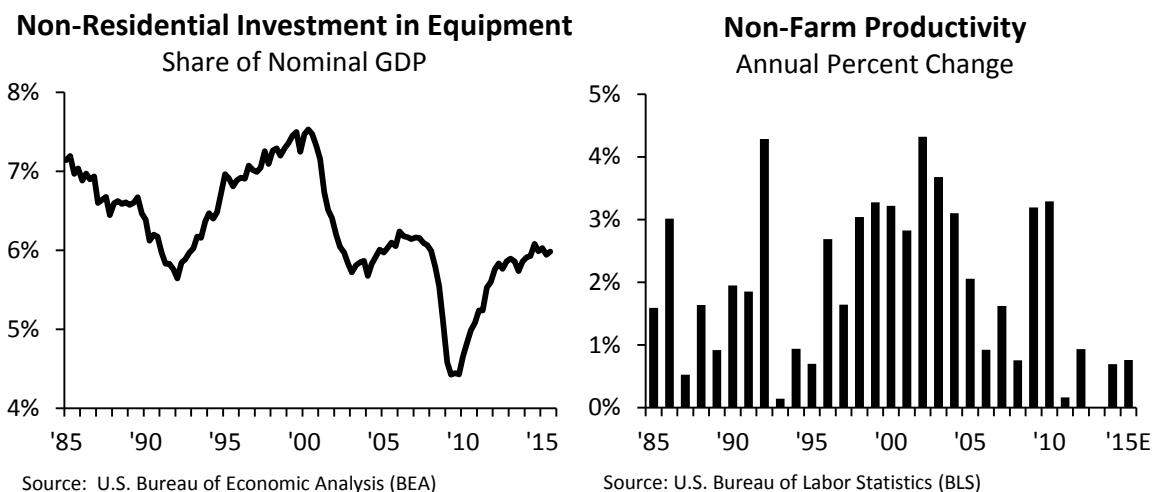
*Manufacturing activity has struggled in 2015, as U.S. producers adjust to the stronger dollar, weakness abroad, lower energy prices, and business' efforts to work off a sizeable inventory glut in the second half of the year.*

**Business Investment.** A tighter labor market and reduced policy uncertainty have not resulted in an acceleration in capital-goods spending, a key to a stronger expansion. Corporate profitability has never been better, cash reserves are at all-time highs, borrowing costs remain low, and rates of return on assets are strong compared to recent decades. Still, these favorable conditions have yet to jumpstart business equipment investment. Instead, more funds are being returned to shareholders, in the form of higher dividends and stock buybacks, and capital spending is still struggling to rebound to its pre-recession share of the economy. A slower pace of investment growth this year is attributable to the stronger dollar and a falloff in drilling activity. Some of the broader disconnect, however, likely has to do with the impact of new technologies and connectivity on investment—which may require less spending on physical capital—as

well as firms' expectations of future profitability. This is consistent with a lower propensity to invest in traditional equipment despite higher profits.

Business investment in new labor-saving equipment and technologies is an important contributor to productivity growth, a major determinant of future living standards. Thus the investment slowdown helps explain why productivity gains have stalled in recent years. Annual productivity growth in the U.S. has averaged only 0.4 percent since 2011, compared to a 2.1 percent average over the past quarter-century. Higher business savings over investment spending also implies slower growth, which has broader implications for the economy under the “secular stagnation” hypothesis—the idea that interest rates, inflation, and growth will remain persistently low, because changing demographics and capital intensity have reduced opportunities for productive investment.

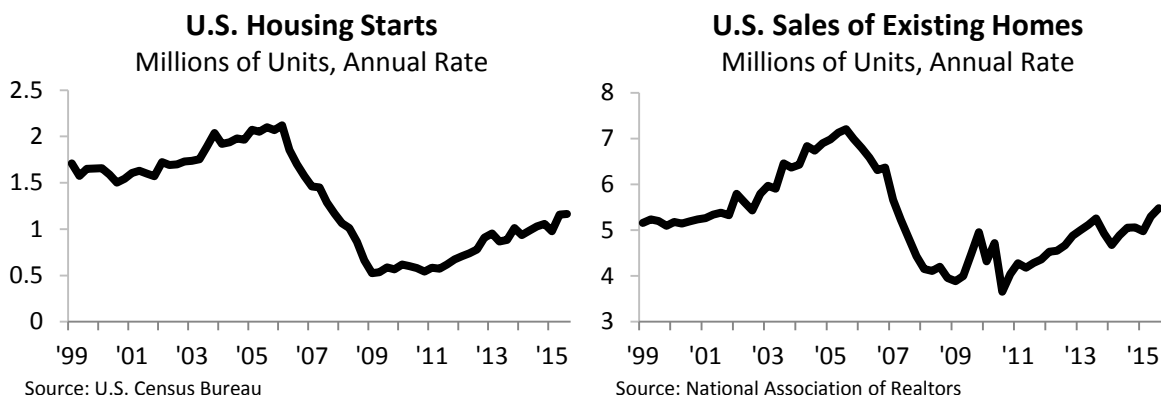
IHS has described the sluggish recovery in the U.S. as a “long adjustment” after a financial crisis—rather than secular stagnation—as private sector deleveraging and public-sector austerity have cut into economic growth rates. IHS believes these twin headwinds have eased. Households and banks have aggressively reduced debt levels, while public sector debt has been stabilized. And there are other reasons to be optimistic. The labor market is tightening, labor costs are beginning to climb, and borrowing costs remain low, making new capital spending to improve productivity more attractive. IHS expects real investment in equipment to make solid and broad-based annual gains of 6 to 7 percent through 2017, following near 4 percent average growth the past three years. Real investment in intellectual property is forecast to make moderate gains of 4 to 5 percent over the forecast horizon, similar to recent years. Growth in real spending on business structures, which is expected to contract 0.8 percent in 2015, is forecast to rebound in 2016 and 2017 by 5.4 and 3.9 percent, respectively. Finally, rising capital expenditures boost productivity, which is expected to accelerate from just 0.8 percent growth in 2015 to near 2 percent by 2018.



*Capital spending is still struggling to rebound to its pre-recession share of the economy and labor productivity – a major determinant of future living standards – has stalled.*

**Housing and Construction.** The nation's disappointing housing recovery has been a direct reflection of surprisingly sluggish household formation since the end of the recession. According to the latest data from the Census Bureau, the number of households in the U.S. has increased by an average of about 1.1 million each year since 2010, just below the long-term trend of 1.15 million prior to the recession and only a modest rebound considering the sizeable deficit caused by the severe recession. The leading cause of the unexpected sluggishness appears to be due to an increasing share of young adults not forming households, perhaps the result of poor wage growth and onerous student loan debts.

With consumer confidence high and the labor market tightening, IHS believes household formation and the demand for new homes are poised for improvement. Annual household formation is expected to have picked up sharply this year, from a revised 793,000 in the year ending in March 2014, to near 1.34 million in early 2015. Furthermore, combined sales of new and existing homes are on track for the strongest year since 2007. The 30-year fixed mortgage rate is expected to average 3.9 percent in 2015 and 4.4 percent in 2016, still very low relative to historic norms, and house prices are holding steady at 5 to 6 percent year-over-year growth despite tighter housing inventory.



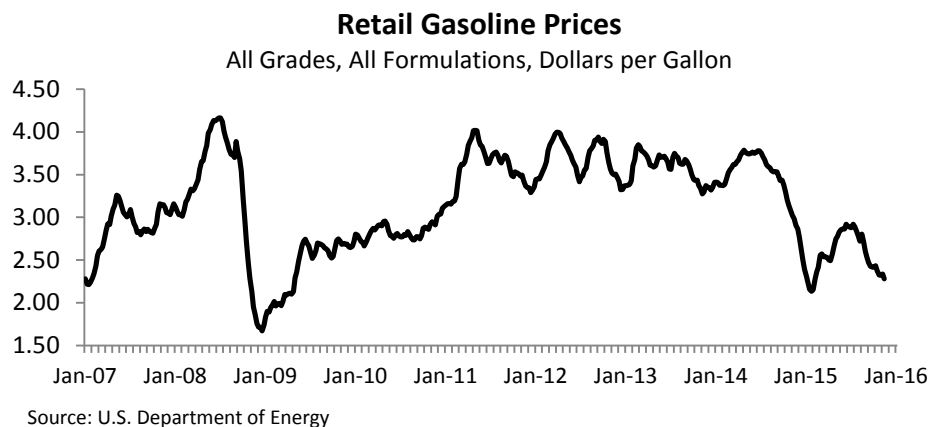
*With consumer confidence high and the labor market tightening, IHS believes household formation and the demand for new homes are poised for improvement.*

Nevertheless, the construction of new homes has not kept pace with rising demand. IHS expects 1.11 million housing starts this year, up from 1.0 million in 2014, but still well below long-term annual average of roughly 1.5 million starts prior to the recession. That imbalance points to a shortage of properties available to potential buyers. It also may mean stronger price appreciation and eroding affordability, unless homebuilding activity picks up. In the November baseline, housing starts rise to 1.28 million in 2016 and to 1.44 million in 2017. With the rise in starts, IHS expects growth in real residential construction spending to gain momentum next year, increasing from 8.5 percent in 2015, to 10.3 and 9.8 percent in 2016 and 2017, respectively.

**Inflation.** Sharply lower prices for gasoline and other oil-based products continue to offset higher prices for food and rent, keeping overall inflationary pressures low. The Bureau of Labor Statistics (BLS) reports its headline inflation measure, the Consumer

Price Index (CPI), is up just 0.1 percent thus far in 2015—measured third-quarter to third-quarter—down from a 1.8 percent increase during the same period in 2014.

Sluggish global demand, excess supply, and a strong dollar have sent crude oil prices plummeting. The price of a barrel of Brent crude oil has fallen by more than half in the past 18 months, from \$112/barrel in June 2014 to around \$46/barrel in mid-November 2015. Gasoline, diesel, and other energy products that are refined from crude have also followed suit. The CPI for gasoline is down 25.0 percent in 2015, after falling 1.9 percent in 2014. Cheaper gasoline prices slow overall consumer price inflation.



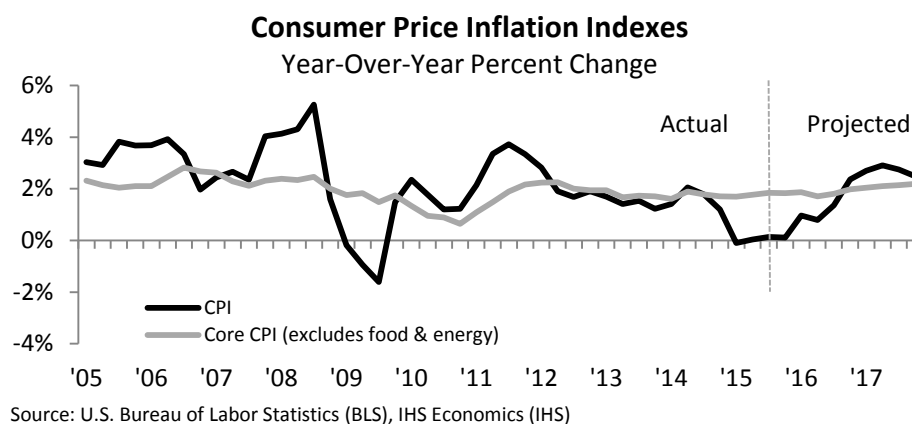
*The average price for a gallon of gasoline was just \$2.28 in mid-November, down 70 cents from a year earlier and \$1.50 since June 2014. Cheaper gasoline prices slow overall consumer price inflation.*

Meanwhile, food has grown more expensive in the past year, in part because consumers are shelling out more for a carton of eggs. Egg prices have soared following the avian flu outbreak that struck the poultry industry in the Midwest last spring and early summer. According to the U.S. Department of Agriculture (USDA), nearly 50 million U.S. poultry birds have been lost to the disease. As a result of shortages, the BLS reports the average price for a dozen eggs was up 44 percent in October from a year earlier, to \$2.81 nationally. The CPI index for eggs is up 32 percent in 2015, compared to a 9.1 percent rise in 2014. The USDA estimates that overall food prices will rise as much as 3.0 percent this year. Over the past 10 years, food prices have risen an average of 2.7 percent, compared to 2.3 percent for all goods and services.

Underlying inflation still shows no material sign of a pickup. Excluding more volatile prices of food and energy, the core CPI is up 1.8 percent in 2015, the same as the year before. Rental costs for housing continue to climb at a very strong pace. The cost of shelter, which includes rents, has extended its steady ascent, rising 3.1 percent in 2015, compared to 2.9 percent in 2014. But the rise in rents has been offset by an easing of other goods prices, such as clothing and used vehicles. The CPI for apparel is down 1.3 percent in 2015, compared to a 0.3 percent rise in 2014. Likewise, the BLS index for used vehicles is down 1.5 percent in 2015, after falling 0.1 percent in 2014.

Overall, near-term inflation remains very low, as the impacts of low energy prices and cheaper imported goods persist. But IHS agrees with the Federal Reserve's view that these drags on inflation are temporary and will correct in the medium-term. Thus consumer prices are expected to firm in the first half of 2016 as oil prices stop falling and the dollar stops strengthening. In the November baseline, IHS expects Brent oil prices to average \$45/barrel in the first quarter of 2016, a cyclical low, before rising to near \$60/barrel in the second half of the year, and continuing a slow ascent back to \$78/barrel by 2019. Likewise, the dollar is expected to slowly strengthen against trading partner currencies into the early part of next year, before beginning a slow, multiyear descent as world growth picks up.

Headline CPI inflation is forecast to move higher over the mid-term, from 0.1 percent in 2015—measured fourth-quarter to fourth-quarter—to 2.4 percent in 2016 and 2.5 percent in 2017. That is over the Federal Reserve's 2 percent longer run objective, implying the Fed will let the labor market run hot for a while. Core CPI inflation accelerates only slightly from 1.8 percent in 2015, to 2.0 and 2.2 in 2016 and 2017, respectively.



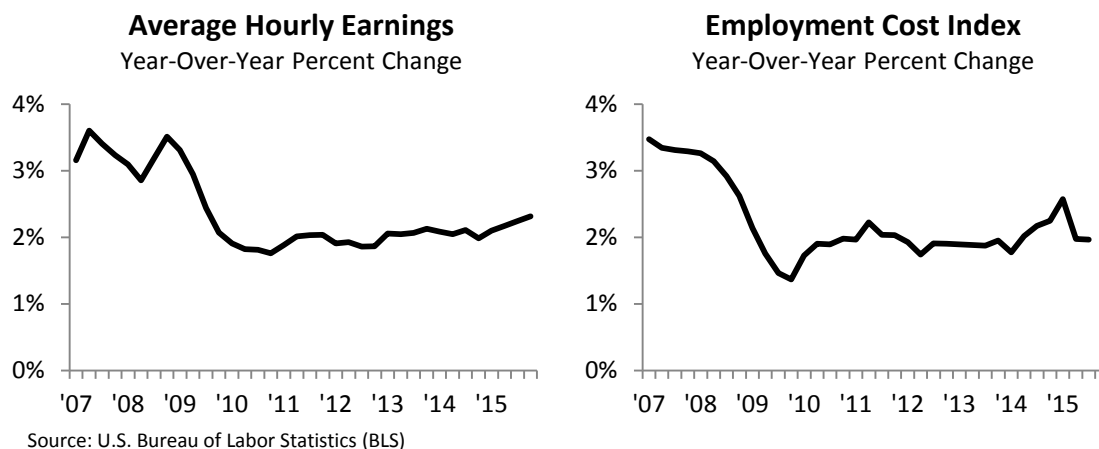
*Inflation is following an expected lower path this year, as lower-priced gasoline and imported consumer goods have put further downward pressure on already low inflation. Even so, IHS continues to believe downward inflation pressures are transitory and will correct in the near-term. Thus inflation is expected to gradually move higher.*

**Monetary Policy.** The combination of low inflationary pressures and weak labor market conditions has allowed the Federal Reserve to maintain highly accommodative monetary policies since the 2008 financial crisis. But after more than seven years of near zero interest rates and less conventional approaches to stimulating the economy, such as large-scale bond-buying programs and forward guidance about how long interest rates are likely to remain low, the Fed has made meaningful progress toward achieving its policy goals of maximum employment and price stability. As a result, the Fed completely ended its asset purchases last winter, and is moving closer to normalizing interest rates. In March, the Fed removed the word “patient” from its guidance on interest rates, signaling that it could raise rates as early as June. But the Fed later held off, preferring to wait longer as signs of slowing growth abroad—particularly in China—added uncertainty. During her testimony to Congress in early November, Federal Reserve Board

Chairwoman Janet Yellen stated that if upcoming data are supportive, a rate hike at the Fed's December meeting is a "live possibility."

Conditions in the labor market have improved considerably in recent years. The economy has generated 13 million jobs since early 2010 and employment now exceeds its pre-recession peak by over 4.3 million. The unemployment rate has trended downward to 5 percent in October, or close to its longer-run normal level. Thus it appears the Fed is very close to achieving the full employment part of its mandate, which should build inflationary pressures.

These developments are encouraging. Nevertheless, inflation continues to run below the Federal Reserve's price-stability objective, as wage growth remains weak. The employment cost index, a broad measure of nominal wage and benefits compensation, has averaged only about 2 percent annual growth since the recession ended more than six years ago. Until wage growth accelerates, inflation pressures are likely to remain low. The Fed's preferred measure of inflation, the price index for core personal consumption expenditures (PCE), which exclude volatile energy and food prices, rose just 1.3 percent over the last 12 months, and has been generally below the Fed's long-term goal of 2 percent inflation for almost three years. Thus, Federal Reserve policymakers are still concerned that wage growth and inflation may stay low in the medium term, suggesting they may need to keep interest rates low for longer.



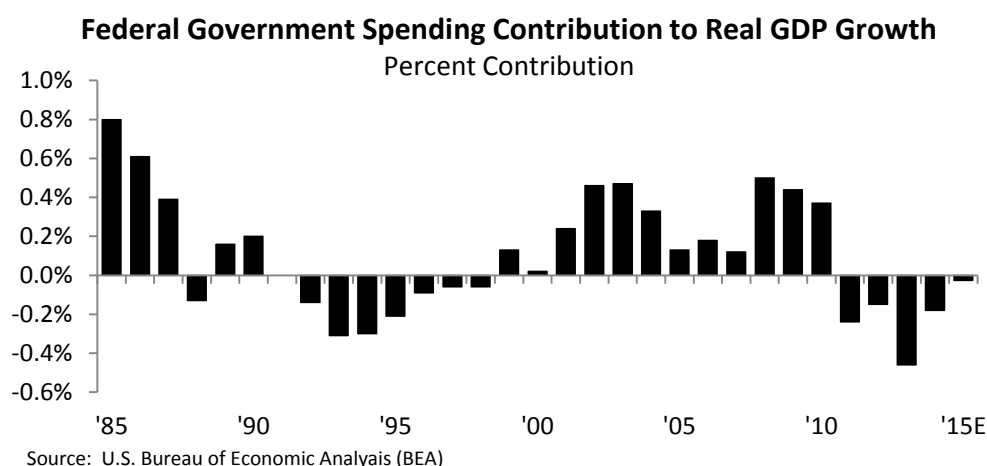
*The employment cost index, a broad measure of nominal wage and benefits compensation, has averaged only about 2 percent annual growth since the recession ended more than six years ago. The increase in average hourly earnings has been similarly sluggish.*

IHS believes the Fed is satisfied with progress in the labor market, and that the prevailing thinking is that the inflation will ultimately pick up again in the mid-term, as the impacts of a strong dollar and lower energy prices eventually dissipate. In the November baseline, the Federal Reserve begins to raise the federal funds rate in December 2015, with four quarter-percentage-point hikes at every other policy meeting through 2017. Thus, the federal funds rate target gradually reaches 1.5 percent in December 2016 and 2.5 percent in December 2017. Longer-term, IHS expects the funds rate target to reach an



equilibrium rate of 3.25 percent by late 2018. IHS acknowledges that more bad news about the labor market later this year or early next could delay the rate hikes.

**Fiscal Policy.** Fiscal policy headwinds that have been holding back economic growth throughout much of the recovery have subsided. Recent agreements between federal policymakers have helped stabilize the economic impact of federal tax and spending policy, the government's fiscal situation has improved, and fading fiscal austerity from recent years is starting to support growth. This has provided an additional boost to the economy in 2015. Nevertheless, lawmakers again face a wide range of near-term fiscal deadlines and have yet to reach agreement on a sustainable and comprehensive solution to the nation's long-term debt challenges. Thus short and long-term fiscal risk factors remain.



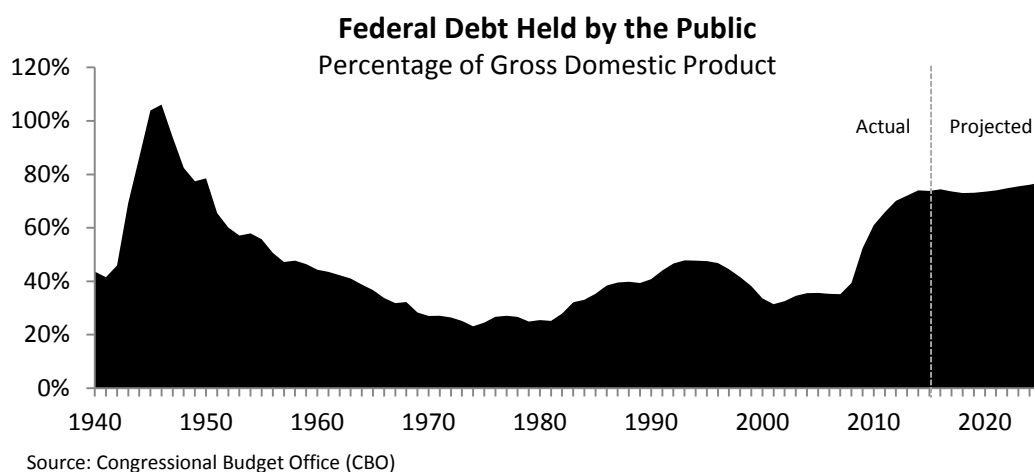
*Fiscal policy headwinds that have been holding back economic growth throughout much of the recovery have subsided. As a result, federal government spending is expected to start contributing to annual real GDP growth in 2016 for the first time since 2010.*

A major source of economic uncertainty was removed in late October — just days before the Treasury was expected to exhaust extraordinary measures used to preserve the nation's borrowing capacity—when Washington lawmakers passed the Bipartisan Budget Act of 2015. The broad budget deal effectively raises the debt limit until March 2017 and funds the federal government through September 2017. The legislation also averts a potentially market-rattling debt crisis, reduces the risk of a government shutdown, and eliminates short-term continuing resolutions or additional rounds of sequestration for the next two years. The agreement is not a so-called grand bargain, but does include some small, meaningful entitlement reforms, such as cuts in Medicare payments to doctors and healthcare providers and changes to the Social Security disability insurance program.

Nonetheless, there are a number of familiar short-term fiscal issues that need to be addressed in coming months. First, the two year budget plan that passed in late October only designates a top-line framework for federal spending. House and Senate appropriation committees will have until December 11—when a stopgap spending measure expires—to pass the individual fiscal 2016 appropriation bills based on the

parameters of the broad agreement, or again risk shutting down the government. Second, the retroactive extension of a bundle of tax credits and deductions that expired at the end of 2014 will need to be passed before the end of December. For the most part, Congress has extended this mix of individual and business tax breaks year after year. The last time the laws were extended was in December 2014. Finally, Washington lawmakers passed another short-term funding patch in mid-November to keep road and mass transit spending going until December 4, 2015. The Federal Highway Trust Fund will need to be reauthorized before that time to prevent state and local governments from cutting back. Lawmakers are said to be making progress on a bicameral agreement with at least three years of guaranteed transportation funding. Congress has not passed a multiyear transportation funding bill in more than decade.

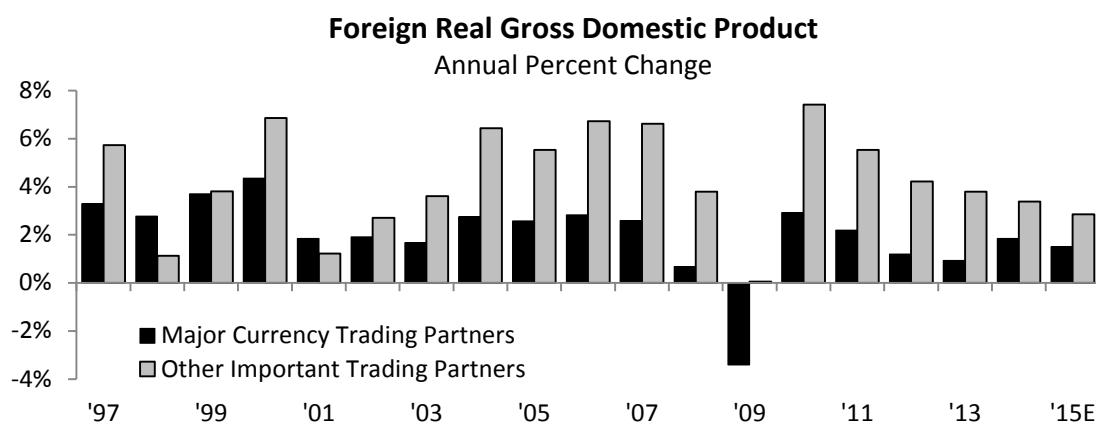
The federal government's near-term fiscal outlook has improved, largely due to an improving economy, robust revenue growth, and restrained discretionary spending. The U.S. Treasury Department concludes that the federal government deficit shrank to \$439 billion in FY 2015, nearly \$46 billion less than the shortfall from 2014 and the smallest since 2007. At approximately 2.4 percent of nominal GDP, that marks the sixth consecutive year in which the deficit has declined as a share of the economy since it peaked at almost 10 percent in 2009. Despite this improvement, Washington lawmakers also still face serious long-term fiscal challenges. The Congressional Budget Office (CBO) projects that if current laws remain unchanged the budget gap between spending and revenues relative to GDP will begin to steadily rise again after 2017, as spending on health care and retirement programs and growing interest payments increase budgetary pressures. Without more broad-based structural changes to the tax code and entitlement programs, CBO projects higher annual deficits will lead to large and growing federal debt relative to the size of the economy. CBO warns that such high and rising debt could have serious negative economic consequences.



*Washington lawmakers have yet to reach agreement on a sustainable and comprehensive solution to the nation's long-term debt challenges. CBO warns that such high and rising debt could have serious negative economic consequences.*

IHS incorporates the majority of an additional \$80 billion of discretionary spending from late October's budget deal into fiscal 2016 and 2017. As a result of this additional government spending, real GDP growth is expected to be 0.2 percentage points higher in 2016, and federal government spending is expected to start contributing to annual real GDP growth next year for the first time since 2010. Likewise, the federal deficit is expected to rise in FY 2016 to about \$521 billion (or 2.8 percent of GDP) and to \$474 billion in FY 2017 (2.4 percent of GDP). IHS assumes that an omnibus spending bill, appropriating the additional budget authority, becomes law by December 11. A government shut down is a remote possibility if there are disagreements during the process. IHS also assumes that the Highway Trust Fund will be extended in some fashion, with more clarity once longer-term legislation and funding designation is passed.

**Global Economy.** Global economic activity is accelerating, but growth prospects among major economies remain uneven. Among the advanced economies, the U.S. continues to improve at a healthy pace, supported by lower oil prices. Japan and the Eurozone, however, are still struggling with sluggish growth and deflationary pressures. In addition, slumping commodity prices are hurting resource-heavy economies, like Canada. In emerging market economies, slower growth is the dominating factor. The Chinese economy is undergoing a structural adjustment that is expected to result in slower economic growth rates in the medium term. Other emerging market economies, like Russia and Brazil, have fallen into deep recessions caused by plummeting commodity prices, high inflation, and political turmoil.

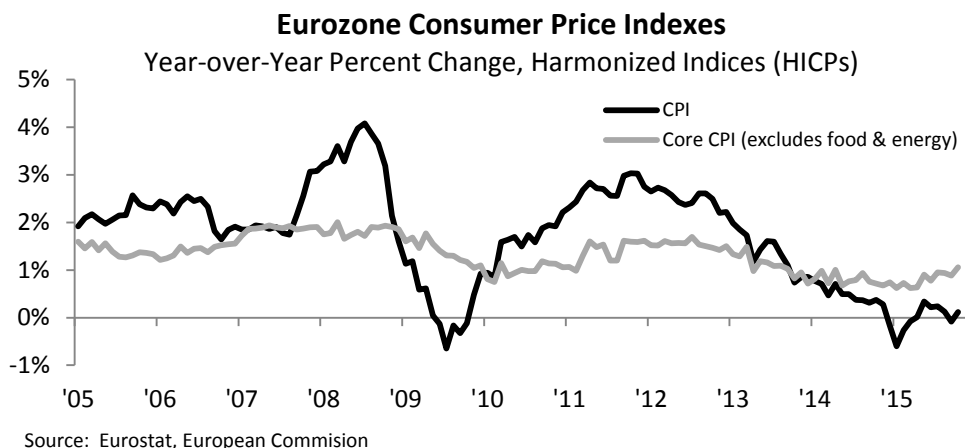


Source: IHS Economics (IHS)

*Global economic activity is accelerating, but growth prospects among major economies remain uneven. In emerging market economies, slower growth is the dominating factor.*

In Europe, the economic recovery is continuing at a slow pace, supported by lower oil prices and additional monetary stimulus. Among other things, this has led to sizeable depreciation of the euro, which makes Eurozone products more competitive overseas. Nevertheless, unemployment in the currency area is still in the double digits, highlighting the scars left behind by Europe's debt crisis. That excess slack is in turn exacerbating deflationary pressures. Prices in the Eurozone were up only 0.1 percent in October from a year earlier, well below the European Central Bank's (ECB) 2 percent target. Even core

inflation, which excludes the effect of volatile items such as food and energy, rose just 1.1 percent from a year ago. Such low levels of inflation makes it more difficult for troubled nations on the Eurozone's periphery, such as Greece, to achieve the relative price adjustments needed to regain competitiveness without having to withstand a protracted period of weak growth and high unemployment. The Greek jobless rate is the highest in Europe, with nearly a quarter of its population unemployed in August, the latest data available. Moreover, low inflation poses a threat to economies if it becomes entrenched in expectations, which can undermine spending and investment decisions and prolong economic sluggishness.

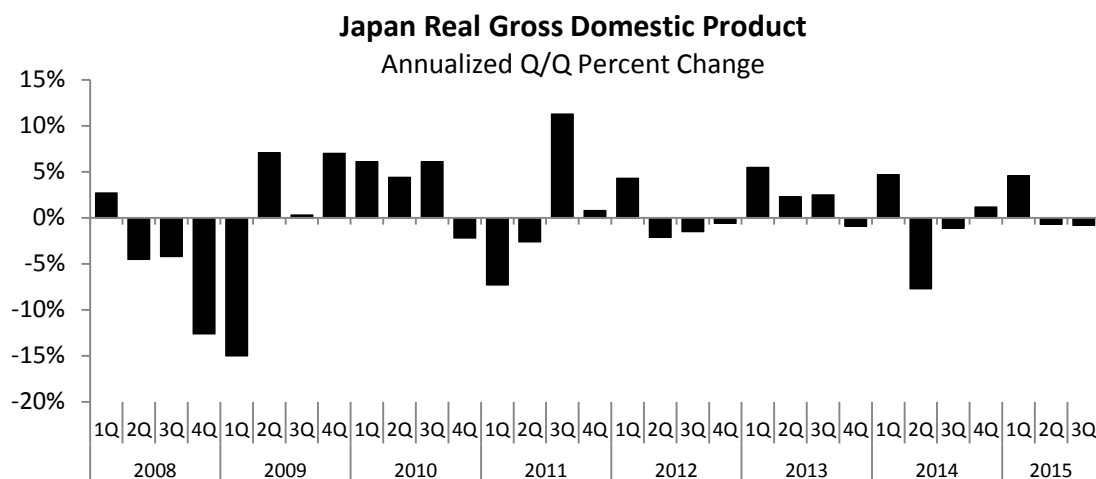


*Global economic activity is accelerating, but growth prospects among major economies remain uneven. The Eurozone is still struggling with sluggish growth and deflationary pressures.*

Progress toward dealing with the fiscal and structural challenges that face the Eurozone has remained limited, placing added pressure on the ECB to act more aggressively to boost inflation expectations and restore growth. The ECB has already cut its key interest rates to new all-time lows, provided cheap funding to Eurozone banks, and launched a private-sector bond-buying program meant to encourage lending in the region. Last January, the ECB took the unprecedented step of expanding its purchases to include—for the first time—government bonds from EU member states and committed to flooding the Eurozone economy with new euros to push up inflation. But price increases have been slow to respond following the recent collapse in oil prices, and market-based measures of inflation expectations are still well below ECB's target. As a result, IHS expects Europe's recovery to remain slow and bumpy. In the November baseline, real GDP growth in the Eurozone is projected to pick up from 0.9 percent in 2014, to just 1.6 and 1.7 percent in 2015 and 2016, respectively.

In Japan, a recent run of bad economic news has revived fears that Prime Minister Shinzo Abe's radical economic strategy—known as “Abenomics”—to reverse more than a decade of stagnation and chronic deflation is faltering. The Japanese economy fell back into recession last spring for the second time in as many years, and similar to the Eurozone, the Bank of Japan (BOJ) is far from meeting its 2 percent inflation target. The BOJ is already buying unprecedented quantities of government debt in an effort to boost

inflation expectations and stimulate growth. The aggressive monetary stimulus has led to a rise in stock prices and a sharp depreciation of the yen. The Japanese yen has lost more than 30 percent of its value against the dollar since Mr. Abe took office in December 2012. Yet the risk of deflation still looms large. The Japanese consumer price index (CPI) was unchanged in September from a year-ago, dragged down by falling oil prices. Excluding food and energy, core prices were up just 0.9 percent. Thus, the BOJ is facing pressure to further expand its stimulus program. In time, the recently completed Trans-Pacific Partnership agreement—a sweeping free-trade agreement with the U.S. and 10 other nations—may also provide a boost to Mr. Abe’s economic program by accelerating the pace of the government’s growth-oriented structural reforms. In the November baseline, IHS expects real GDP in Japan to rebound from a 0.1 percent contraction in 2014, to growth of 0.5 percent in 2015 and 1.0 percent in 2016. The longer-term outlook will depend on further progress with structural reforms, mainly deregulation of the labor market.



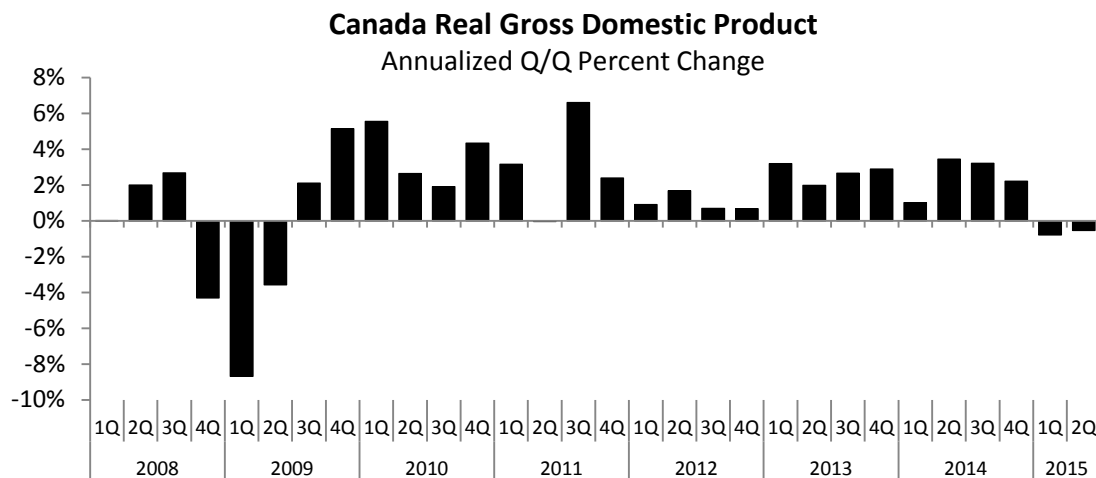
Source: Economic and Social Research Institute, Cabinet Office, Government of Japan

*In Japan, a recent run of bad economic news has revived fears that Prime Minister Shinzo Abe's radical economic strategy is faltering. The Japanese economy fell back into recession last spring for the second time in as many years.*

In Canada, energy-related activity has been a key driver of economic growth throughout the recovery. But the recent collapse in global oil prices has dried up capital investment in its energy sector, dragging Canada’s economy into a mild recession in the first half of 2015. More recent data show signs that the downturn is easing. With oil prices now stable, IHS expects the weak Canadian dollar to improve international competitiveness for its exports. As a result, real GDP growth in Canada—the United States’ largest trading partner—is projected to slowly pick up from 1.0 percent in 2015, to 1.8 percent in 2016 and 2.3 percent in 2017, supported by a steady reacceleration of U.S. demand.

In China, the pace of economic growth is slowing. China’s real GDP rose 7.3 percent in 2014, much faster than any advanced economy, but the weakest growth the world’s second largest economy has recorded since 1990. Further, the International Monetary Fund (IMF) forecasts China’s economic growth to ease to 6.8 percent this year, compared

with the government's official target of 7 percent. Chinese policymakers are attempting to reduce the risk of a sharp and prolonged slowdown, or hard landing, by deliberately steering the economy away from a heavy reliance on exports and credit-fueled investment toward more balanced and sustainable consumer-led growth. The IMF believes this shift will continue to require structural reforms to the financial system, state-owned enterprise, and local government, as well as a more market-based exchange rate system. This tradeoff is resulting in a slowdown in imports of key commodities—such as iron ore, crude oil, and soybeans—and increased financial market volatility. IHS also believes weak domestic demand and renewed global economic weakness will weigh on Chinese growth prospects. Thus they expect real GDP growth in China to weaken further, to 6.3 percent in 2016, before bouncing back modestly in 2017.



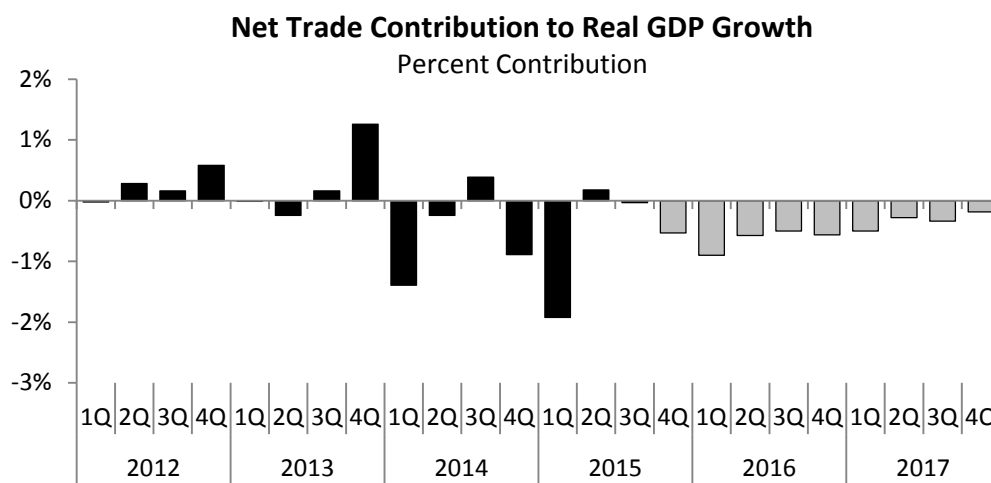
Source: Statistics Canada, Government of Canada

*In Canada, the recent collapse in global oil prices has dried up capital investment in its energy sector, dragging the Canadian economy into a mild recession in the first half of 2015.*

Meanwhile, other major emerging market economies, such as India and Mexico, continue to experience slight improvements in 2015, as optimism about economic reforms, progress in controlling inflation, and lower commodity prices (India) are contributing to better growth. In Russia and Brazil, however, a major slowdown is reflected by weak investment, high inflation, and currency devaluation. Russia's economy is in deep recession, further affected by sharply lower oil prices and international sanctions due to the ongoing political conflict in the region. The Russian ruble has lost nearly half its value against the dollar since mid-2014. Brazil is suffering its worst recession in 25 years, as rising interest rates, low business and consumer confidence, and weak competitiveness are constraining domestic demand. Plummeting commodity prices and political dysfunction are also weighing on Brazil's economic growth.

IHS expects economic growth of the United States' major-currency trading partners to pick up slightly in 2016 and 2017, with stronger growth in Canada, Japan, and Europe. The economies of other important trading partners, such as Mexico and India, are also expected to grow faster over the next two years. IHS projects world real GDP growth to

accelerate from 2.5 percent in 2015, to 3.0 and 3.3 percent growth in 2016 and 2017, respectively. The trade-weighted value of the dollar against major trading partners is expected to increase by 16.1 percent in 2015, level off in 2016, and gradually decline for the remainder of the forecast horizon. As a result, net trade remains a heavy drag on growth in 2016 and 2017, as imports pick up due to the stronger U.S. dollar and steady domestic growth, and export growth remains tepid from subpar world growth and less competitive foreign markets. Real U.S. imports are projected to rise from 5.3 percent growth in 2015, to 5.8 and 6.4 percent growth in 2016 and 2017, respectively. Exports are forecast to pick up from 1.6 percent growth in 2015, to 2.8 and 4.4 percent growth in 2016 and 2017.



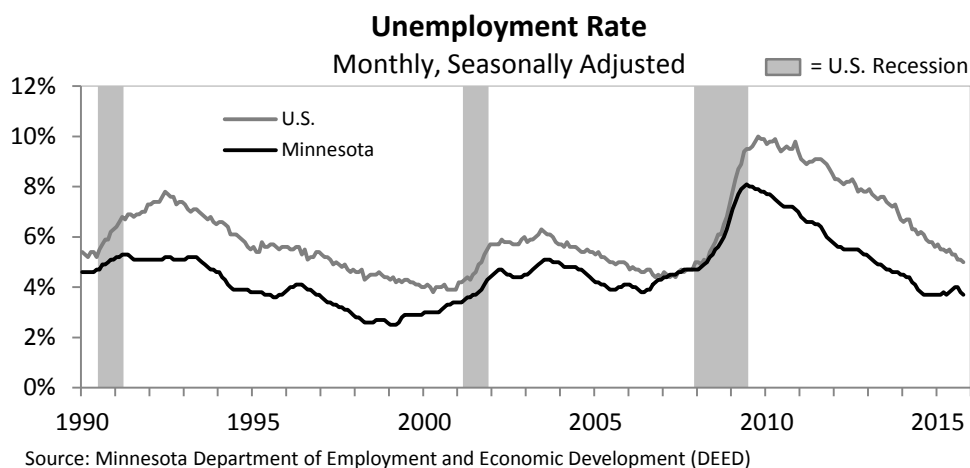
Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics

*Net trade remains a heavy drag on U.S. economic growth in 2016 and 2017, as imports pick up due to the stronger U.S. dollar and steady domestic growth, and export growth remains tepid from subpar world growth and less competitive foreign markets.*

## Minnesota Economic Outlook

Minnesota's labor market performance has been impressive since the recession ended more than six years ago. The state has added more than 50,000 jobs since employment surpassed its pre-recession peak in mid-2013, and most indicators suggest the labor market continues to tighten considerably. The number of job vacancies in Minnesota has soared to the highest level since 2001, and the state's jobless rate was down to 3.7 percent in October, matching the low that has prevailed since mid-2014. With the excess supply of workers rapidly diminishing, a tighter labor market is leading to some long-awaited wage acceleration. It increasingly appears that Minnesota is near its full employment potential.

Still, Minnesota's economy faces challenges. Manufacturing, mining, and agricultural activity in the state has struggled in 2015, as Minnesota producers adjust to lower commodity prices, the strong dollar, and weak global growth. The pace of the state's housing recovery has been slow in part due to persistently slow household formation, although there are recent signs of improvement. Moreover, Minnesota's labor force growth remains weak, despite the fast-tightening job market. This is impeding the state's ability to increase employment. Minnesota Management and Budget's (MMB) economic forecast depends on stronger labor market conditions beginning to translate into improvements in household formation, the supply of labor, and productivity, thereby putting further upward pressure on hourly wage growth.



*Minnesota's jobless rate was down to 3.7 percent in October, matching the low that has prevailed since mid-2014.*

**Revised Economic Forecast.** Forecasts for state employment and wages have been revised based on recent Minnesota-specific information and the IHS Economics (IHS) November 2015 baseline. The November baseline informs a newly re-estimated MMB model of the Minnesota economy. That model incorporates preliminary information on forthcoming revisions to Minnesota's non-farm payroll employment, as well as new data from the Quarterly Census of Employment and Wages (QCEW) and income tax withholding collections since February.



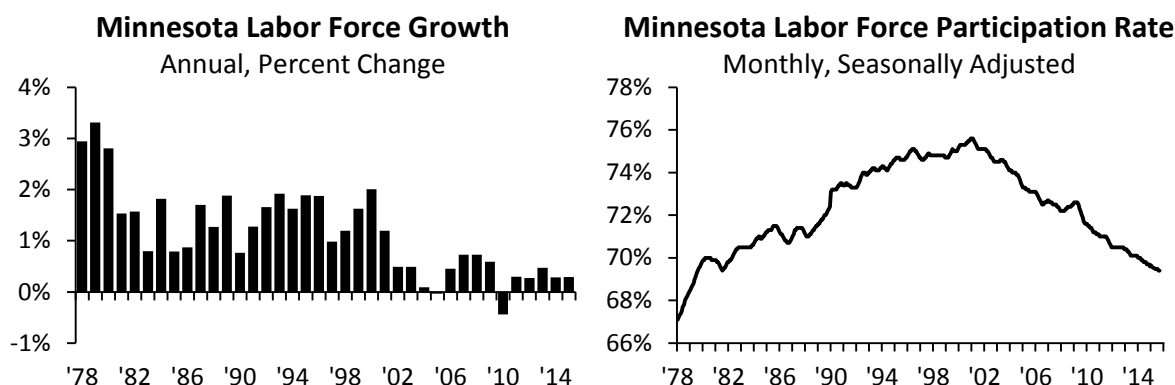
## Forecast Comparison: Minnesota &amp; U.S.

Forecast 2015 to 2019, Calendar Years

|  | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Total Non-Farm Payroll Employment (Thousands)</b>               |         |         |         |         |         |         |         |         |
| <b>Minnesota</b>   |         |         |         |         |         |         |         |         |
| November 2015  | 2,730   | 2,776   | 2,816   | 2,858   | 2,894   | 2,929   | 2,957   | 2,980   |
| %Chg   | 1.6     | 1.7     | 1.4     | 1.5     | 1.3     | 1.2     | 0.9     | 0.8     |
| February 2015  | 2,731   | 2,778   | 2,817   | 2,863   | 2,915   | 2,955   | 2,982   | 3,010   |
| %Chg   | 1.6     | 1.7     | 1.4     | 1.6     | 1.8     | 1.4     | 0.9     | 0.9     |
| <b>U.S.</b>  |         |         |         |         |         |         |         |         |
| November 2015  | 134,098 | 136,394 | 139,023 | 141,898 | 144,120 | 146,092 | 147,939 | 149,545 |
| %Chg   | 1.7     | 1.7     | 1.9     | 2.1     | 1.6     | 1.4     | 1.3     | 1.1     |
| February 2015  | 134,098 | 136,394 | 139,023 | 142,098 | 144,771 | 146,843 | 148,197 | 149,612 |
| %Chg   | 1.7     | 1.7     | 1.9     | 2.2     | 1.9     | 1.4     | 0.9     | 1.0     |
| <b>Wage and Salary Disbursements (Billions of Current Dollars)</b> |         |         |         |         |         |         |         |         |
| <b>Minnesota</b>   |         |         |         |         |         |         |         |         |
| November 2015  | 135.4   | 139.6   | 145.9   | 153.0   | 160.0   | 167.6   | 175.4   | 183.9   |
| %Chg   | 4.9     | 3.1     | 4.6     | 4.9     | 4.5     | 4.8     | 4.7     | 4.8     |
| February 2015  | 135.6   | 139.7   | 145.7   | 153.7   | 161.1   | 169.0   | 176.8   | 184.9   |
| %Chg   | 5.0     | 3.1     | 4.3     | 5.4     | 4.8     | 4.9     | 4.6     | 4.6     |
| <b>U.S.</b>  |         |         |         |         |         |         |         |         |
| November 2015  | 6,930   | 7,114   | 7,478   | 7,778   | 8,143   | 8,577   | 9,015   | 9,468   |
| %Chg   | 4.5     | 2.7     | 5.1     | 4.0     | 4.7     | 5.3     | 5.1     | 5.0     |
| February 2015  | 6,932   | 7,125   | 7,432   | 7,770   | 8,175   | 8,605   | 9,040   | 9,502   |
| %Chg   | 4.5     | 2.8     | 4.3     | 4.5     | 5.2     | 5.3     | 5.1     | 5.1     |
| <b>Non-Wage Personal Income (Billions of Current Dollars)</b>      |         |         |         |         |         |         |         |         |
| <b>Minnesota</b>   |         |         |         |         |         |         |         |         |
| November 2015  | 119.1   | 117.5   | 121.5   | 125.1   | 130.9   | 137.6   | 145.3   | 152.4   |
| %Chg   | 5.7     | -1.3    | 3.4     | 3.0     | 4.6     | 5.1     | 5.6     | 4.9     |
| February 2015  | 119.3   | 117.7   | 120.5   | 125.1   | 131.1   | 138.6   | 145.9   | 152.6   |
| %Chg   | 5.9     | -1.3    | 2.4     | 3.8     | 4.8     | 5.7     | 5.3     | 4.6     |
| <b>U.S.</b>  |         |         |         |         |         |         |         |         |
| November 2015  | 6,985   | 6,954   | 7,216   | 7,531   | 7,853   | 8,275   | 8,726   | 9,171   |
| %Chg   | 5.5     | -0.4    | 3.8     | 4.4     | 4.3     | 5.4     | 5.5     | 5.1     |
| February 2015  | 6,956   | 7,042   | 7,284   | 7,544   | 7,887   | 8,369   | 8,807   | 9,243   |
| %Chg   | 5.9     | 1.2     | 3.4     | 3.6     | 4.6     | 6.1     | 5.2     | 5.0     |
| <b>Total Personal Income (Billions of Current Dollars)</b>         |         |         |         |         |         |         |         |         |
| <b>Minnesota</b>   |         |         |         |         |         |         |         |         |
| November 2015  | 254.5   | 257.1   | 267.4   | 278.1   | 290.8   | 305.2   | 320.7   | 336.3   |
| %Chg   | 5.2     | 1.0     | 4.0     | 4.0     | 4.6     | 4.9     | 5.1     | 4.9     |
| February 2015  | 254.9   | 257.5   | 266.3   | 278.7   | 292.2   | 307.5   | 322.7   | 337.5   |
| %Chg   | 5.4     | 1.0     | 3.4     | 4.7     | 4.8     | 5.2     | 4.9     | 4.6     |
| <b>U.S.</b>  |         |         |         |         |         |         |         |         |
| November 2015  | 13,915  | 14,068  | 14,694  | 15,310  | 15,996  | 16,851  | 17,742  | 18,639  |
| %Chg   | 5.0     | 1.1     | 4.4     | 4.2     | 4.5     | 5.3     | 5.3     | 5.1     |
| February 2015  | 13,888  | 14,167  | 14,717  | 15,313  | 16,062  | 16,974  | 17,847  | 18,745  |
| %Chg   | 5.2     | 2.0     | 3.9     | 4.1     | 4.9     | 5.7     | 5.1     | 5.0     |

Source: IHS Economics and Minnesota Management and Budget (MMB)

MMB's November 2015 economic forecast calls for Minnesota's expansion to continue over the next several years, but at a generally slower pace than the national average. Both employment and wage income growth are expected to remain modest in 2016 and 2017, with the average nominal wage slowly accelerating. The forecast expects small improvements in household formation, labor force growth, and labor productivity.



Source: Minnesota Department of Employment and Economic Development (DEED), Minnesota Management & Budget (MMB)

*Minnesota's labor force growth remains very weak. In the November 2015 economic forecast, improved job prospects and faster wage growth encourage some people to reenter the labor force, thus slowing the decline in labor force participation rate through at least early 2017.*

Minnesota total non-farm employment is estimated to rise a modest 1.5 percent in 2015, following a similar 1.4 percent increase in 2014. In MMB's November 2015 economic forecast, Minnesota employment grows at a somewhat slower annual pace of 1.3 percent in 2016 and 1.2 percent growth in 2017, reflecting an economy running close to its full potential and job gains more consistent with demographic trends. In February 2015, MMB's forecast called for stronger annual job growth of 1.6 percent in 2015, followed by 1.8 and 1.4 percent in 2016 and 2017, respectively. MMB's near-term employment forecast is slower than the IHS November 2015 baseline forecast for U.S. job growth, which calls for 2.1 percent annual growth in 2015, followed by 1.6 percent growth in 2016 and 1.4 percent growth in 2017.

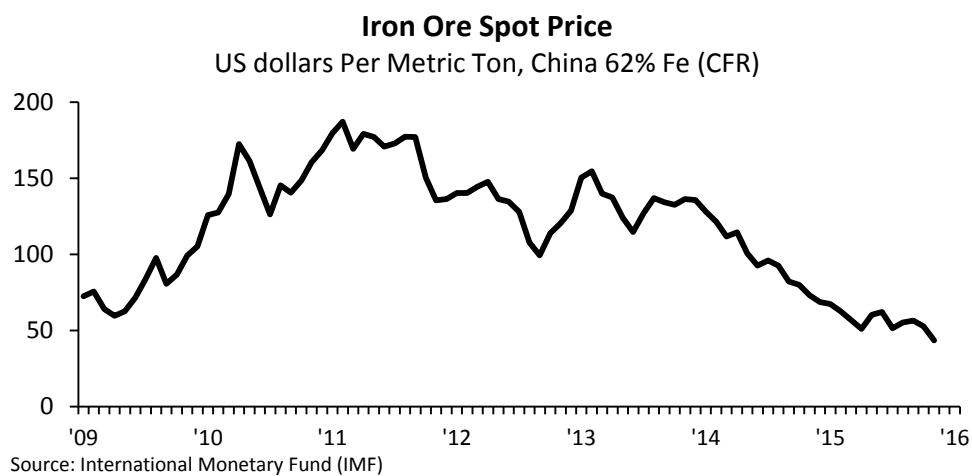
Information from income tax withholding collections and the QCEW suggest nominal growth in Minnesota's total wage and salary income accelerated to 4.9 percent in 2015, up from 4.6 percent growth in 2014. Wage income is now expected to ease to 4.5 percent growth in 2016 and 4.8 percent growth in 2017. In February, MMB's forecast called for stronger gains of 5.4 percent in 2015, followed by 4.8 and 4.9 percent in 2016 and 2017, respectively. The IHS November 2015 baseline forecast for U.S. wage income calls for growth of 4.0 percent in 2015, followed by 4.7 percent in 2016 and 5.3 percent in 2017.

MMB's Minnesota economic forecast assumes that IHS Economics' November 2015 baseline forecast of the U.S. economy materializes. Any unanticipated adverse developments in the U.S. economy, such as a longer than expected downshift in U.S.

labor force growth or productivity, will have unfavorable effects on the Minnesota economy.

**Iron Ore Mining.** Cooling demand in China, combined with a global supply glut of steel, has led to a collapse in prices for both finished steel and its primary raw material, iron ore. Prices for iron ore have plummeted by over 65 percent in the past 24 months, from \$130/ton in early 2014 to near \$45/ton in late November. That squeezes producers' profit margins.

Slumping global prices coupled with the stronger dollar is also making foreign steel less expensive, sparking a surge in U.S. imports, including by auto makers. In response, domestic steelmakers have cut prices, curbed production, and reduced demand for Minnesota taconite iron ore, the source of approximately 75 percent of total U.S. production. This has led to the idling or slowing of mining operations on Minnesota's Iron Range this year, directly affecting over 2,000 workers. That accounts for nearly half of northeastern Minnesota's 4,400 iron ore mining jobs in 2014. It also impacts jobs and income in support industries, including utilities, transportation and manufacturing.



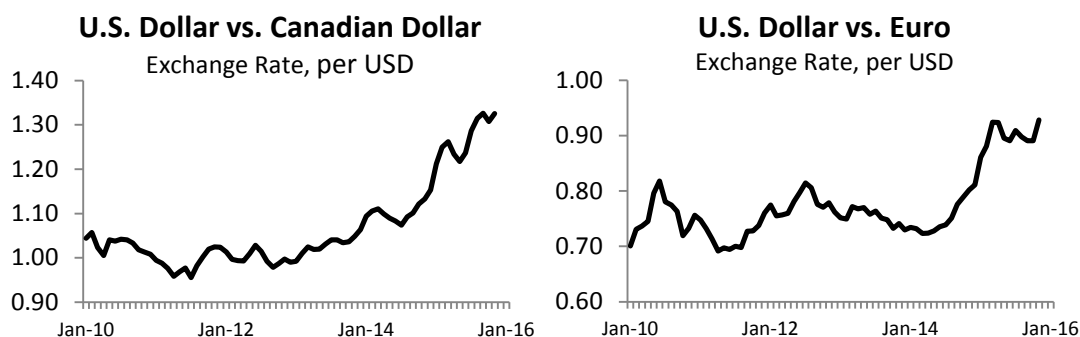
*Cooling demand in China, combined with a global supply glut of steel, has led to a collapse in prices for both finished steel and its primary raw material, iron ore. This has led to the idling or slowing of mining operations on Minnesota's Iron Range this year.*

**Exports.** Minnesota's exports of goods and services to countries throughout the world have been an important source of economic strength in recent years. According to data from the Minnesota Department of Employment and Economic Development (DEED), Minnesota businesses sent a record \$21.4 billion worth of agricultural, mining, and manufactured goods abroad in 2014, a 3.4 percent increase from \$20.7 billion exported the year before. That totals about 6.8 percent of the state's GDP.

Canada (\$5.6 billion in 2014), Mexico (\$2.2 billion) and China (\$2.3 billion), are among Minnesota's largest export markets for goods, including manufactured machinery, iron ore, snowmobiles and ATVs, and self-adhesive materials. European countries as a group accounted for \$4.6 billion worth of manufactured products sent abroad in 2014. Belgium,

Germany and the United Kingdom are among Minnesota's largest European purchasers of goods such as medical instruments and tractors.

Nonetheless, the relative strength of the U.S. economy is attracting foreign investors, which has driven up the value of the dollar. The trade-weighted dollar is up more than 20 percent against major trading partners since mid-2014. A stronger dollar relative to major trading partners makes Minnesota produced goods and commodities more expensive in Canada, Europe, and elsewhere in the world, reducing demand for the state's products abroad. Already, Minnesota's exports have fallen 6 percent during the first nine months of 2015 from a year earlier. Canada, the state's largest trading partner, has reduced Minnesota product orders by 23 percent. The recent collapse in global oil prices has dried up capital investment in Canada's energy sector, dragging its economy into a mild recession earlier this year.



Source: Federal Reserve

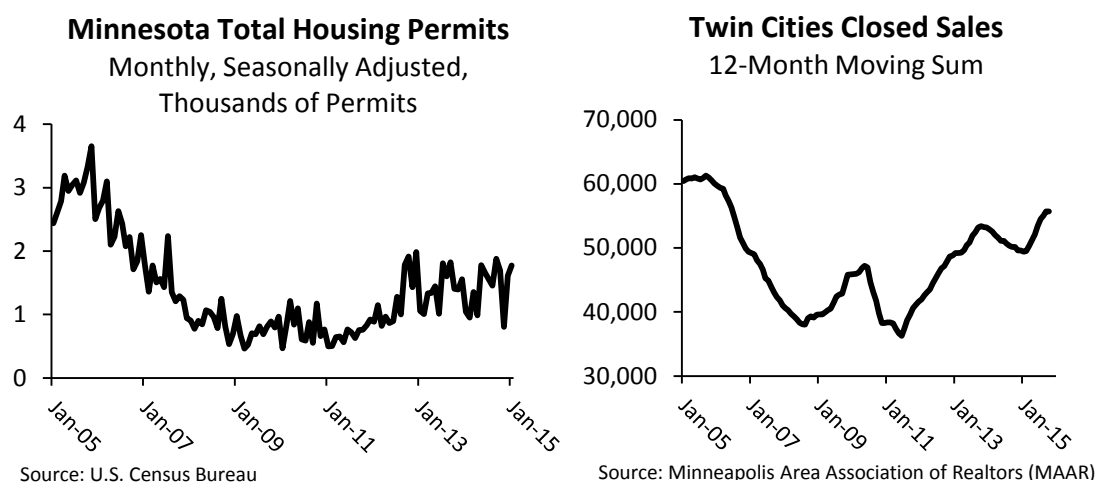
*A stronger dollar relative to major trading partners makes Minnesota produced goods and commodities more expensive in Canada, Europe, and elsewhere in the world, reducing demand for the state's products abroad.*

Minnesota's manufacturing activity has also cooled, as the state's producers adjust to weaker foreign growth and the strong dollar. Results from a survey of supply managers for the Mid-America Business Conditions Index signal that Minnesota's manufacturing sector dropped back into contractionary territory later this year. The new orders component of the index has fallen to the lowest levels since 2012. This raises concerns of weak, or even negative manufacturing output growth in late 2015 and into early 2016, as exports slide even lower.

**Housing.** The state's housing recovery continues, with recent signs of improvement from what has been a slow pace set by sluggish household formation. From 2011 to 2014, the U.S. Census Bureau estimates the number of households being formed in Minnesota averaged just 9,000 per annum, far fewer than the 24,000 formations expected each year given the growth and age distribution of the population, and only a modest rebound considering the sizeable deficit caused by the severe recession. The leading cause of the unexpected slowdown appears to be due to an increasing rate of young adults sharing homes, perhaps the result of poor wage growth and heavy student loan debts.

Household formation is a key demographic driver of the demand for housing. Thus abnormally slow formations help explain why housing sales and starts in Minnesota have been similarly restrained in recent years, despite a fast improving labor market. In the Twin Cities area, for instance, the Minneapolis Area Association of Realtors (MAAR) reports closed sales abruptly fell 6.9 percent in 2014, following 9.0 percent growth in 2013. Likewise, the Census Bureau reports the total number of authorized residential building permits in Minnesota was just 16,800 in 2014, the same as the year before. For context, the long-term annual trend is 30,000 permits per annum.

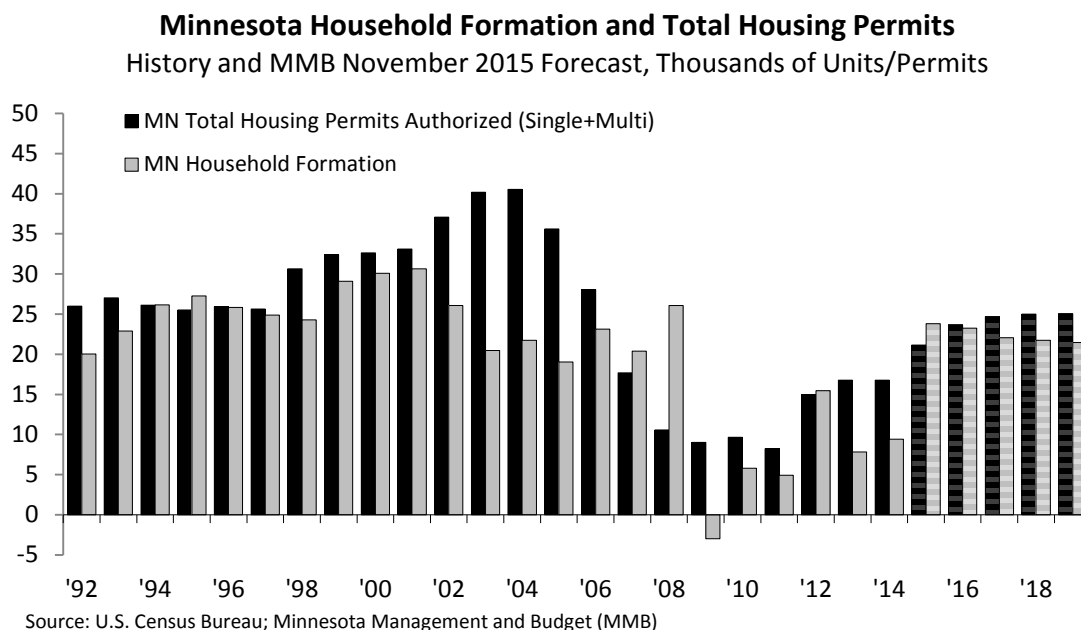
More recently, however, there are encouraging signs that household formations are poised for improvement. The demand for housing appears to have returned in 2015. Closed sales in the Twin Cities area have rebounded a solid 14.2 percent during the first 10 months of the year relative to the same period last year. And building permits are on pace to improve to 21,100 in 2015, a nine-year high, as builders have ramped up construction of single-family homes.



*There are encouraging signs that household formations are poised for improvement. The demand for housing appears to have returned in 2015.*

In MMB's November 2015 forecast, annual household formation is expected to rise to 26,000 in 2015—measured fourth quarter to fourth quarter—consistent with an economy nearing its full potential, stronger wage growth, and improving headship rates among young adults. In 2016 and 2017, annual net new formations are forecast to be 23,000 and 22,000, respectively. With demand for new home construction steadily improving, and inventories and mortgage rates still at historic lows, building permits are similarly expected to maintain solid gains. Total housing permits are forecast to be 23,600 in 2016 and to 24,700 in 2017. Finally, new housing construction means greater need for building tradespeople like carpenters and roofers. Residential construction employment, including specialty trade contractors, is forecast to add 4,500 jobs (4.8 percent) in 2015—measured fourth quarter to fourth quarter—followed by continued gains of 4,700 jobs (4.8 percent) in 2016 and 3,600 jobs (3.5 percent) in 2017. Therefore, some of the assumed job losses in the mining and energy industries will be absorbed by a thriving construction sector.

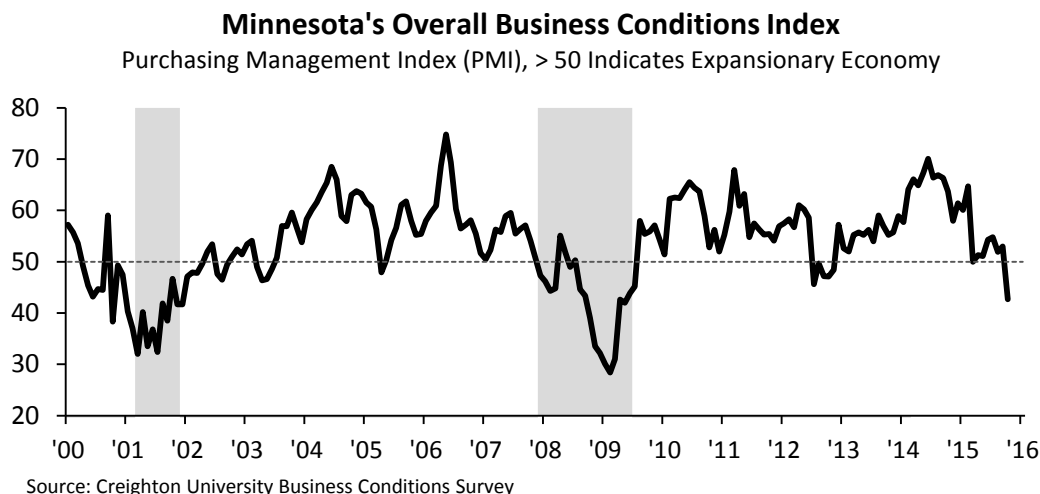
Economists at MMB believe that if household formation rates remain sluggish, due to weaker-than-expected labor market conditions or headship rates among young adults, Minnesota's housing recovery is unlikely to perform as forecast.



*Abnormally slow household formations since the end of the recession helps explain why housing sales and starts in Minnesota have been similarly restrained in recent years, despite a fast improving labor market.*

**Employment.** The latest employment data suggests low commodity prices, the strong dollar, and a tightening labor market may be starting to constrain job growth across the state. At the beginning of each year, DEED realigns Minnesota's monthly, sample-based employment estimates with state unemployment insurance (UI) tax records filed by nearly all employers, a process referred to as benchmarking. A preliminary benchmark revision by MMB demonstrates that annual Minnesota employment has been growing at a slower pace in 2014 and 2015 than in previous years, and about a half percentage point less than the national average.

A slower pace of job growth this year is partly attributable to low commodity prices and the strong dollar, which is taking their tolls on employment in Minnesota's mining and manufacturing industries. These factors may tamp down growth for several years. Some of the broader slowdown, however, likely has to do with the state nearing its full employment potential, as job growth is being increasingly constrained by slower labor force growth and demographic trends.



*Minnesota's manufacturing activity has cooled, as the state's producers adjust to weaker foreign growth and the strong dollar. This raises concerns of weak, or even negative manufacturing output growth in late 2015 and into early 2016, as exports slide even lower.*

Minnesota Management and Budget's November 2015 economic forecast expects revised employment growth of 36,800 in 2015—measured fourth quarter to fourth quarter—down from 42,200 in 2014 and 45,000 in 2013. The prospects for 2016 are similarly modest, with job gains of 37,000, led by healthcare, professional and business services, and construction. Employment growth downshifts again in 2017 and 2018 as businesses focus toward improving productivity to keep labor costs down.

**Labor Market.** Minnesota's labor market continues to tighten up. Steady job growth has helped push the state's unemployment rate back down to 3.7 percent in October, the lowest among states with major metropolitan areas. This is below the low point (3.8 percent) of the previous 2002-2007 economic expansion. DEED reports unemployment has fallen across age and gender. The number of officially long-term unemployed—lasting 27 weeks or longer—is just one-third of what it was in mid-2011, and the rate of involuntary part-time employment is back to near pre-recession levels.

Labor market conditions have also tightened as a result of fewer people being laid off. According to DEED, the number of Minnesotans filing new claims for unemployment benefits, generally barometer of short-term labor market trends, has averaged about 18,000 per month thus far in 2015, down from a recessionary peak of nearly 44,000 during the summer of 2009 and back to levels not seen since the late 1990s, after adjusting for population growth.

Other leading indicators, such average hours worked, temporary help employment, and job vacancies are also at levels consistent with a firming labor market. The average workweek in the private sector, for instance, is holding steady at about 34 hours, the highest in a series of data dating back to 2008. Temporary help jobs, often a bellwether of employment growth, have settled into a healthy growth path. Finally, last October DEED reported that the number of Minnesota job vacancies reached a 14-year high during the

second quarter of 2014. Employers registered about 98,000 openings, up almost 16 percent from a year earlier. That worked out to only about 1.2 unemployed people for each vacancy last spring. According to DEED, the Twin Cities has a ratio of 1.1 unemployed persons to every job vacancy. The ratio stands at 1.2 in Greater Minnesota.

Even while Minnesota's labor force participation rate exceeds the U.S. rate, it remains very weak. The portion of working-age Minnesotans who have or are looking for a job has dropped from about 72 percent near the start of the recession in December 2007, to just below 70 percent this past October, matching the 34-year low that has prevailed since late-2014. People generally leave the labor force for two reasons: because they have retired or grown increasingly discouraged with employment prospects and stopped looking for work. DEED figures show that the number of discouraged workers in Minnesota has already fallen close to a normal, pre-recession level. Therefore, much of the drop in labor force participation is more likely a result of demographic forces related to Minnesota's aging population. Indeed, between 2007 and 2014, the number of retired Minnesotans age 65 and older drawing social security benefits rose by about 131,000, a labor force exodus that could account for about a 1.6 percentage point drop in the state's labor force participation rate compared to previous trends.



*Labor market conditions have also tightened as a result of fewer people being laid off. The number of Minnesotans filing new claims for unemployment benefits has dropped to levels not seen since the late 1990s, after adjusting for population growth.*

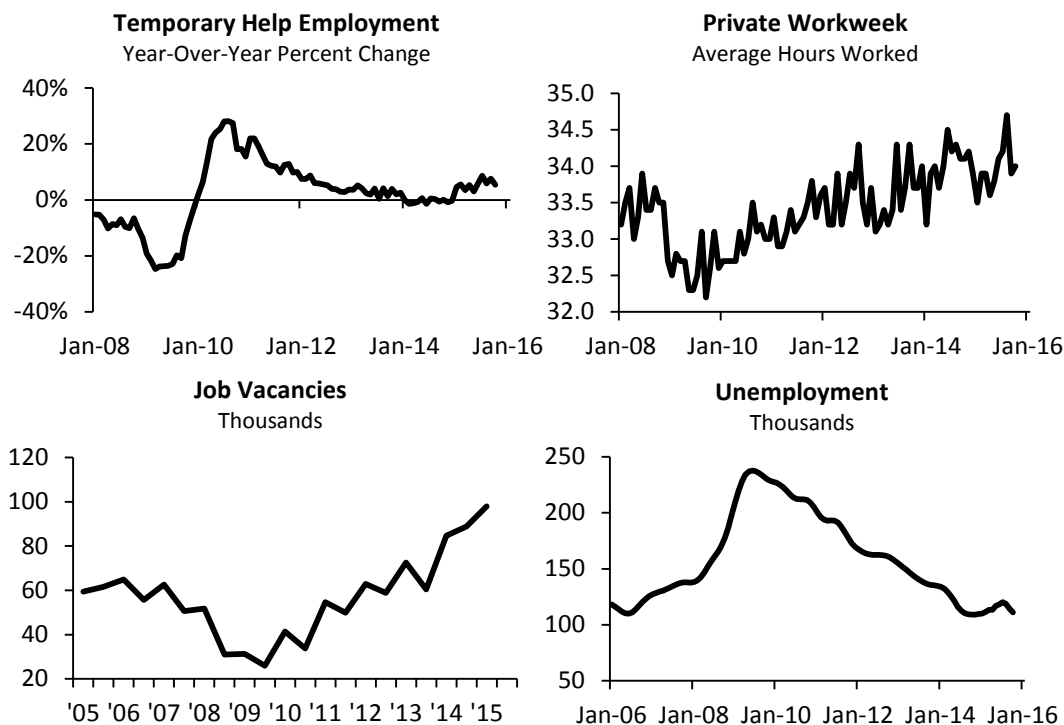
In the November 2015 economic forecast, Minnesota's labor market inches closer to its full potential. The state's unemployment rate is likely to ease down further in coming months as more slack in the job market, particularly among disadvantaged segments of the population, is taken up by an improving economy. Better economic fundamentals both nationally and in Minnesota also support an upturn in productivity, and thereby acceleration in wage growth. Improved job prospects and faster average wage growth encourage some people to reenter the labor force, thus slowing the decline in Minnesota's labor force participation rate through at least early 2017. As a result, annual labor force growth is assumed to pick up steadily, from an average of just 0.3 percent in 2014 and 2015, to 0.6 percent in 2016 and 2017. Beyond that, Minnesota's labor market settles into



full potential, and job growth becomes increasingly constrained to the market supply of labor and demographic trends.

Barring sizeable increases in domestic and international migration or an unexpected pick up in labor force participation, MMB economists believe job growth in the medium-term may be constrained to annual increases of only 10,000 to 25,000 jobs. By comparison, actual employment has increased an average of over 40,000 per annum in the past five years.

### Minnesota Leading Indicators



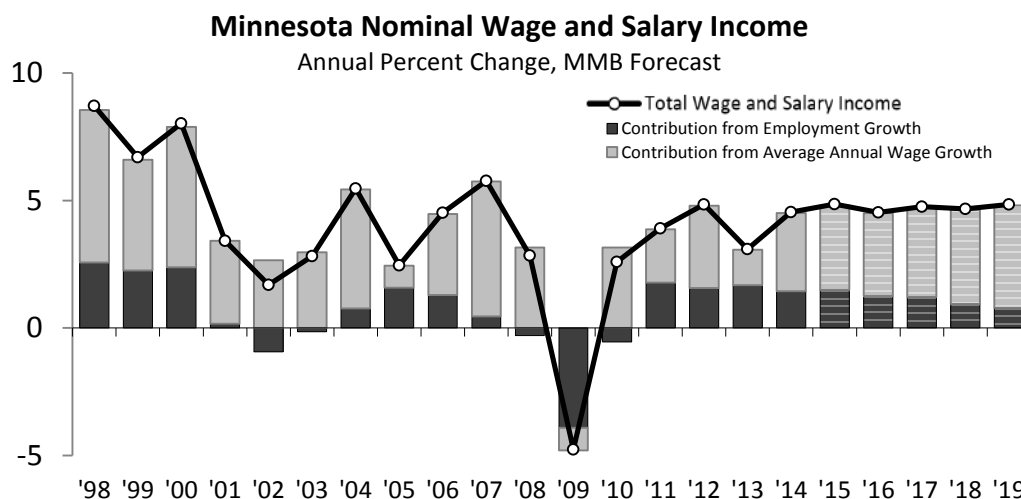
Source: Minnesota Department of Employment and Economic Development (DEED)

*Minnesota's leading labor market indicators, such average hours worked, temporary help employment, and job vacancies are at levels consistent with a firming labor market.*

**Wage and Salary Income.** Total wage and salary income is one of the most important variables used to determine Minnesota's individual income tax liability. According to the state's income tax sample, for example, it accounted for nearly three-quarters of federal adjusted gross income for Minnesota residents in 2013. In MMB's model of Minnesota's economy, nominal wage income is derived largely as a function of the hourly cost of labor (or average hourly wages), hours worked, and employment. Therefore, tracking the direction of these three important indicators provides a useful account concerning the underlying path of nominal wage income.

Average hourly wage growth in Minnesota has been weak for several years due in part to high overall slack in the labor market and the lack of productivity growth. MMB's proxy

measure for the change in workers' average hourly wages in Minnesota is the Employment Cost Index (ECI)—defined as nominal wage compensation per employee hour worked. The ECI has averaged only about 2 percent annual growth since the recession ended more than six years ago, while real wage compensation has been mostly flat. Likewise, the length of the average workweek, MMB's proxy measure for hours worked, declined during the Great Recession, then rebounded to near pre-recession levels by early 2012, and has since fluctuated only little in recent years. Therefore, nominal gains in total wage and salary income throughout much of the recovery have been largely driven by solid job growth. Employment rebounded in the early years following the recession, but unlike hours worked, has since continued to grow at a steady 1.4 to 1.7 percent pace.



*With average wages slowly accelerating, growth in total wage and salary income is expected to remain modest in 2016 and 2017, despite slowing employment growth.*

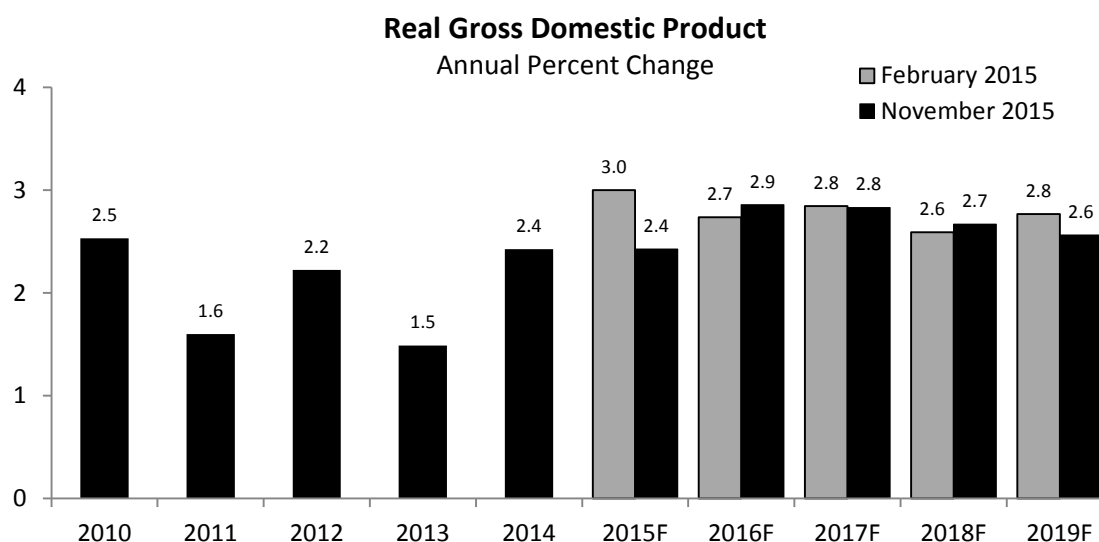
As Minnesota's labor market settles into its full potential, employment cannot grow beyond gains in the labor force without causing accelerating wage pressures. To keep labor costs down, MMB economists expect businesses to refocus on labor-saving capital investments, and take other steps to boost productivity—the amount each worker produces. As productivity gains increasingly substitute for additional labor, job growth is expected to cool toward slower demographic trends. But more and better quality jobs should put further upward pressure on average wage growth, which is expected to reach near 3.5 percent per annum when the labor market is at full-potential. This is equal to the sum of 1.5 percent productivity growth and 2 percent inflation—the Federal Reserve's target. In the November forecast, slow acceleration in average annual wages offsets slowing employment growth, allowing total wage and salary income to grow modestly.

Economists at MMB believe that without a substantive rebound in productivity growth in the forecast horizon, total wage and salary income is likely to rise slower than expected.

## Council of Economic Advisors' Statement

Minnesota's Council of Economic Advisors (CEA) met on November 10, 2015, to review the IHS Economics (IHS) outlook for the U.S. economy, which includes the assumptions underlying Minnesota's November 2015 *Budget and Economic Forecast*. Council members noted that since February, IHS has slightly reduced their overall growth expectations for 2015 to 2019. The largest change occurs early in the forecast, with projected real GDP growth in 2015 decreasing from 3.0 percent in February's outlook to 2.4 percent in November. In the November forecast, consumer spending, business investment, and government spending all contribute less to 2015 real GDP growth, and net exports subtract more. Compared to February, the November outlook has real GDP growing 0.2 percentage points faster in 2016.

Council members also noted that much of the forecast weakness is behind us. Following annualized real GDP growth of 3.9 percent in the second quarter of 2015, an anticipated inventory correction dragged third quarter growth to 1.5 percent. IHS expects fourth quarter growth to pick back up to 2.4 percent, followed by 3.4 percent in the first quarter of 2016. Already, payrolls surged by 271,000 in October, following two lackluster months of employment growth.



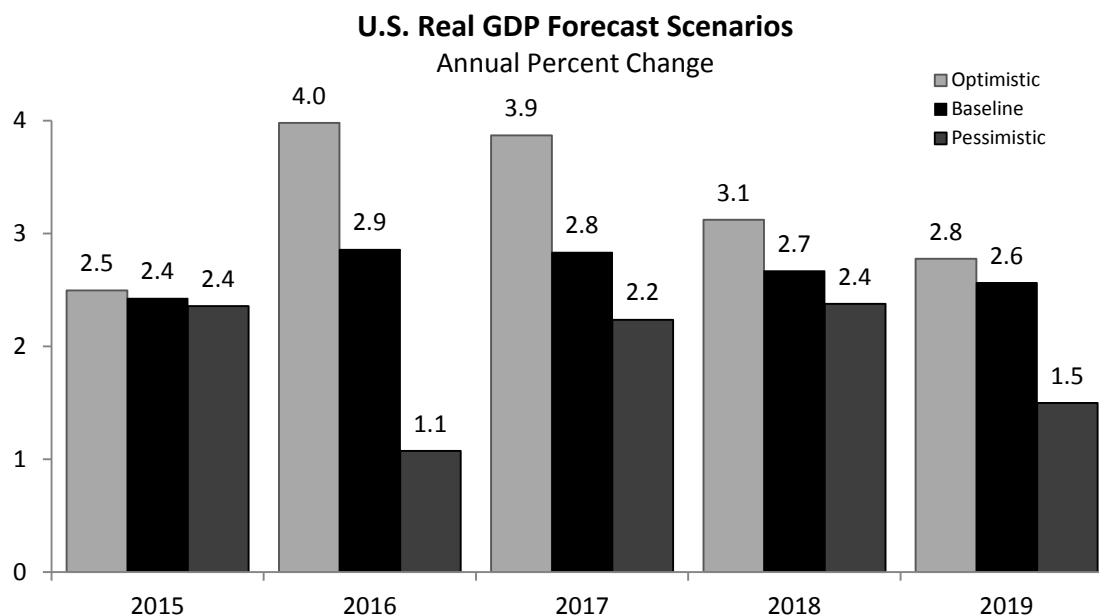
Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

*Minnesota's Council of Economic Advisors noted that IHS has slightly reduced their overall growth expectations for 2015 to 2019 since MMB's Budget and Economic Forecast was last prepared in February 2015.*

The IHS November outlook is slightly above that of other macroeconomic forecasters. IHS's November forecast of 2.4 percent growth in 2015 matches the Blue Chip Consensus forecast. For 2016, IHS expects higher growth than the consensus: 2.9 percent compared to 2.6 for Blue Chip. In October, Blue Chip reported long-range consensus forecasts for 2017-19. For each year in the remainder of the forecast horizon, IHS's forecast is 0.3 to 0.4 percentage points above the consensus.

Council members acknowledged risks to U.S. growth over the forecast period. Higher-than-expected household formations could boost demand for homes and related goods, leading the U.S. economy to grow faster than IHS forecasts. On the other hand, slower global growth, a sharper decline in labor force participation, and continued sluggish wage growth can weaken the U.S. outlook. Council members also noted that the Federal Reserve's expected move away from what has been extraordinarily accommodative monetary policy adds uncertainty to the forecast. If the path to policy normalization is uneven, or if higher interest rates lead to unanticipated levels of asset devaluation, the U.S. economy could underperform IHS' expectations.

All council members agreed that the IHS baseline expectations for U.S. economic growth are a reasonable starting point for MMB's November 2015 *Budget and Economic Forecast*. Regarding forecast risks, they believe that for 2016 and 2017 the threat of the economy growing more slowly than IHS expects exceeds the potential for faster growth. They also think that the difficulty of projecting long range economic conditions warrants caution when using forecasts for 2018 and 2019.



Source: U.S. Bureau of Economic Analysis (BEA), IHS Economics (IHS)

*Minnesota's Council of Economic Advisors agreed that IHS's expectations for U.S. economic growth are a reasonable starting point for MMB's November 2015 Budget and Economic Forecast.*

As it has done every year since 2003, the CEA recommends that budget planning estimates for the next biennium include expected inflation in both the spending and revenue projections. The CEA noted that Minnesota's current practice of excluding projected changes in the prices of goods and services from a majority of the spending estimate is fundamentally misleading. It is inconsistent with both sound business practices and CBO methods and potentially encourages legislators and the public to regard the state's financial position more optimistically than the facts warrant. The

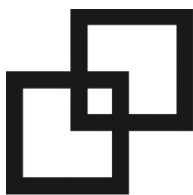
omission of inflation in the spending estimates in the February 2015 Budget and Economic Forecast understated the cost of current services as provided by law in FY 2016-17 by roughly \$900 million, and thus made the difference between projected revenues and the cost of providing services to appear to be larger than it actually is. This distortion will increase if and when inflation accelerates from current historically low levels.

Council members believe that Minnesota's budget reserve policy affords policymakers crucial financial flexibility during economic downturns and can promote long-term fiscal stability. The statutory policy assigns an adequate target reserve level based on MMB's annual evaluation of volatility in Minnesota's general fund tax system. Based on MMB's most recent analysis, the target level is 4.8 percent of biennial (two-year) general fund revenues. The target is a percentage of forecast revenues, allowing reserves to adjust with revenue changes over time. Finally, the policy automatically transfers 33 percent of a positive forecast balance each November into the reserves until the target is reached.

Nevertheless, council members note that the state's currently funded budget reserve remains below the level bond rating agencies expect from AAA-rated credits. State bond ratings depend on a number of factors, but both Standard and Poor's and Moody's specifically include a measure of the adequacy of statutory budget reserves in their credit analyses. In Standard and Poor's analytical framework, states with statutory reserve levels of 4 percent or more of biennial revenue or spending receive top marks. Moody's ratings guidelines indicate that Aaa-rated states should have statutory reserves of at least 5 percent of biennial revenue. Minnesota's current \$994 million budget reserve is only about 2.4 percent of forecast FY 2016-17 revenues. Minnesota also has a cash flow account, which is intended to offset potential cash shortages caused by a mismatch between monthly revenue collections and spending. If the cash flow account—currently \$350 million—is included, reserves are about 3.2 percent of projected biennial revenues.<sup>1</sup>

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<sup>1</sup> This reflects the levels of reserves and projected revenues at the time of the November 10, 2015 Council meeting. With the release of the November 2015 *Budget and Economic Forecast*, the budget reserve is \$1.597 billion, or 3.8 percent of FY 2016-17 general fund non-dedicated revenues. If the cash flow account is included, reserves are 4.6 percent of biennial revenues.



## BUDGET OUTLOOK

### Closed Biennium

The last *Budget & Economic Forecast* was released in February 2015. It projected a \$476 million budgetary balance in FY 2014-15. Actions in the 2015 regular and special legislative sessions, including a \$455 million transfer and payment shift to the health care access fund partially offset by spending reductions in transportation and higher education, reduced the projected ending balance for the biennium to \$47 million.

**FY 2015 Close.** In August, the books were officially closed for the fiscal year and biennium that ended June 30, 2015. The 2014-15 biennium ended with a positive general fund balance of \$632 million, \$585 million more than estimated at the end of the 2015 special legislative session. The closing balance at the end of the biennium represents “money in the bank” in the 2016-17 biennium. It is also a significant factor in the forecast for the current biennium – accounting for more than 60 percent of the forecast improvement in the projected FY 2016-17 ending balance.

FY 2015 total resources—including revenues and transfers in—were \$564 million higher than previously forecast. Much of the increase in revenue for FY 2015 tax revenue is due to higher individual income tax receipts and corporate franchise tax collections. These increases were partially offset by lower than anticipated net sales tax receipts. Total tax revenue was \$516 million higher than previously projected.

Forecast changes in other resources added \$33 million to the bottom line. Adjustments to prior fiscal years (\$18 million) and transfers (\$15 million) account for the additional resources.

Actual spending for FY 2015 was \$118 million below end of session estimates. A reduction of \$28 million in health and human services spending accounted for much of the savings in FY 2015. Lower than expected use of health care by new Medical Assistance (MA) enrollees contributed to the savings. Lower property tax refund payments in the property tax aids and credits budget area accounted for \$23 million lower spending. The balance is attributed to unspent appropriations that carried forward for spending in the next biennium.

FY 2015 concluded on June 30, 2015 with the cash flow account at \$350 million and the budget reserve at \$994 million –unchanged from end of session estimates. The stadium reserve account balance at close was \$33 million, an increase of \$3 million due to higher than expected gambling tax receipts during the fiscal year.

**FY 2015 Close: General Fund Budget**

End-of-Session vs. Actual Comparison

| (\$ in millions)               | End-of-Session  | Actual          | \$<br>Change   | %<br>Change   |
|--------------------------------|-----------------|-----------------|----------------|---------------|
| <b>Beginning Balance</b>       | <b>\$1,886</b>  | <b>\$1,886</b>  | <b>\$ -</b>    | <b>0.0%</b>   |
| <b>Revenues</b>                |                 |                 |                |               |
| Taxes                          | 19,071          | 19,587          | 516            | 2.7           |
| Non-Tax Revenues               | 737             | 753             | 15             | 2.1           |
| Transfers, Other Resources     | 138             | 171             | 33             | 24.0          |
| <b>Total Revenues</b>          | <b>\$19,946</b> | <b>\$20,510</b> | <b>\$564</b>   | <b>2.8%</b>   |
| <b>Expenditures</b>            |                 |                 |                |               |
| E-12 Education                 | 8,188           | 8,188           | -              | 0.0%          |
| Property Tax Aids              | 1,635           | 1,613           | (23)           | (1.4)         |
| Health & Human Services        | 6,219           | 6,191           | (28)           | (0.4)         |
| Debt Service                   | 623             | 624             | 1              | 0.1           |
| All Other                      | 3,745           | 3,677           | (68)           | (1.8)         |
| <b>Total Expenditures</b>      | <b>\$20,411</b> | <b>\$20,293</b> | <b>\$(118)</b> | <b>(0.6)%</b> |
| <b>Balance Before Reserves</b> | <b>\$1,421</b>  | <b>\$2,103</b>  | <b>\$682</b>   |               |
| Budget Reserve and Cash Flow   | 1,344           | 1,344           | -              |               |
| Stadium Reserve                | 30              | 33              | 3              |               |
| Appropriations Carried Forward | -               | 94              | 94             |               |
| <b>Budgetary Balance</b>       | <b>\$47</b>     | <b>\$632</b>    | <b>\$585</b>   |               |

**Current Biennium**

The last *Budget & Economic Forecast*, released in February 2015, projected a budgetary balance of \$1.867 billion for the 2016-17 biennium. Actions during the 2015 regular and special legislative sessions left \$865 million unspent. Spending and revenue changes in this forecast increase the forecast balance to \$1.871 billion. However, current law allocates a portion of this balance in several ways.

The first provision provides for the repayment of funds borrowed during the 2015 special session for spending during the 2016-17 biennium. Based on a positive unrestricted general fund budgetary balance at the end of the biennium, MMB is directed to transfer \$63 million to the closed landfill investment fund and \$8 million to the metropolitan landfill contingency action trust account. The second provision allocates 33 percent of any positive unrestrictive balance to the budget reserve. \$594 million is allocated to the budget reserve in this forecast.

After accounting for forecast changes and statutory allocations, a \$1.206 billion budgetary balance now remains in the current biennium, \$341 million higher than end of session estimates. The following table and analysis reflects these allocations in the FY 2016-17 biennium.

**Current Biennium: FY 2016-17 General Fund Budget**

End-of-Session vs. November 2015 Forecast Comparison

| (\$ in millions)           | End-of-Session  | November 2015<br>Forecast | \$<br>Change   | %<br>Change   |
|----------------------------|-----------------|---------------------------|----------------|---------------|
| <b>Beginning Balance</b>   | <b>\$1,421</b>  | <b>\$2,103</b>            | <b>\$682</b>   | <b>48.0%</b>  |
| <b>Revenues</b>            |                 |                           |                |               |
| Taxes                      | 40,803          | 40,905                    | 102            | 0.3           |
| Non-Tax Revenues           | 1,426           | 1,426                     | 0              | 0.0           |
| Transfers, Other Resources | 400             | 388                       | (12)           | (3.1)         |
| <b>Total Revenues</b>      | <b>\$42,629</b> | <b>\$42,718</b>           | <b>\$90</b>    | <b>0.2%</b>   |
| <b>Expenditures</b>        |                 |                           |                |               |
| E-12 Education             | 17,236          | 17,309                    | 73             | 0.4           |
| Property Tax Aids          | 3,353           | 3,358                     | 6              | 0.2           |
| Health & Human Services    | 12,481          | 12,064                    | (416)          | (3.3)         |
| Debt Service               | 1,267           | 1,241                     | (27)           | (2.1)         |
| All Other                  | 7,497           | 7,683                     | 186            | 2.5           |
| <b>Total Expenditures</b>  | <b>\$41,834</b> | <b>\$41,656</b>           | <b>\$(178)</b> | <b>(0.4)%</b> |
| Budget Reserve             | 994             | 1,597                     | 602            |               |
| Cash Flow Account          | 350             | 350                       | -              |               |
| Stadium Reserve            | 7               | 13                        | 6              |               |
| <b>Budgetary Balance</b>   | <b>\$865</b>    | <b>\$1,206</b>            | <b>\$341</b>   |               |

Revenue in the current biennium is now projected to reach \$42.718 billion, an improvement of \$90 million (0.2 percent) over end of session estimates. A reduction in the forecast for individual income tax receipts (\$110 million) is offset by an increased forecast for sales tax (\$91 million), corporate franchise tax (\$69 million) and cigarette taxes (\$67 million).

Spending in the FY 2016-17 biennium is reduced \$178 million (0.4 percent) from end of session estimates and is now projected to be \$41.656 billion. Revisions to the forecast for health and human services (HHS) reduce expenditures by \$416 million (3.3 percent) in that budget area and more than account for the overall reduction in spending estimates for the current biennium. Lower rates paid to managed-care organizations through the Medical Assistance (MA) program drive the overall HHS reduction. The forecast for debt service is also down \$27 million (2.1 percent) due to lower interest rates.

The reduction in HHS spending is offset by increases in other areas of the budget. The E-12 education forecast is increased slightly by \$73 million (0.4 percent). Appropriations that have special legal authority to carry forward from the previous biennium increase spending in the current biennium by \$94 million. Finally, conditional general fund transfer provisions that were enacted into law during the 2015 regular and special sessions and implemented either with the fiscal year close or this forecast increase spending in this biennium by \$93 million.

Chapter 65 from the 2015 regular legislative session and chapter 4 from the 2015 special legislative session direct MMB to transfer \$19 million to the disaster



contingency account and \$3 million to fire safety account in FY 2016 if the FY 2015 closing balance is \$17.5 million greater than the projected end of session balance of \$47 million.

Chapter 65 also directs MMB to transfer \$63 million to the closed landfill investment fund and \$8 million metropolitan landfill contingency action trust account if the forecast shows a positive unrestricted general fund budgetary balance at the end of the biennium.

Since both of these conditions were met, transfers totaling \$93 million are included in FY 2016 – 17 spending estimates.

**Budget Reserve.** Current law requires two transfers to the budget reserve account with this forecast. Under M.S. 79.521, a portion of the excess surplus in the workers' compensation assigned risk plan is deposited to the general fund and directed to the budget reserve. In July, \$13 million was transferred to the General Fund; of that amount \$5 million is appropriated for workers' compensation program reform and \$8 million was credited to the budget reserve account.

In addition, M.S. 16A.152 directs MMB to allocate funds to the budget reserve account, provided three conditions are met.

First, the state must have a forecast balance for the current biennium. With this forecast, the FY 2016-17 projected forecast balance is \$1.871 billion.

Second the existing statutory provisions that allocate forecast balances to restoring reserves, repaying accounting shifts and repaying borrowed funds must be satisfied before depositing additional resources into the reserve. With this forecast, provisions transferring \$63 million to the closed landfill investment fund and \$8 million metropolitan landfill contingency action trust account have been fulfilled and there are no other outstanding provisions.

Third, the state's budget reserve account level must be below the level recommended to adequately manage the volatility of the general fund tax structure. The current report, released in September 2015, recommends a budget reserve level of 4.8 percent of the current biennium's general fund non-dedicated revenues, or \$2.032 billion for the 2016-17 biennium. With this forecast \$8 million is added to the state's budget reserve account prior to allocations bringing the level to \$1.002 billion, below the amount recommended.

Since all three conditions were met in this forecast, current law triggers a deposit of 33 percent of the forecast balance to the budget reserve. Of the total \$1.871 billion projected forecast balance for FY 2016-17, \$594 million is credited to the budget reserve account, increasing the reserve to \$1.597 billion in FY 2016. With this increase, the budget reserve is approximately 3.8 percent of general fund non-dedicated revenue in the current biennium. Including the cash flow account, total general fund reserves are 4.6 percent of biennial revenues.

**Stadium Reserve.** An improved gambling tax forecast has increased the stadium reserve account in all years for this forecast. Gambling tax receipts are projected to be approximately \$3 million higher (6.7 percent) in each year from FY 2016-19 compared to end of session estimates. With this forecast, the stadium reserve account is projected to be \$12 million by the end of FY 2019, up from a projection of \$0 in end of session estimates.

## Planning Estimates

Out-year planning estimates, based on current law revenues and expenditures, are presented to detail the impacts of the forecast on future years, as well as to help decision-makers identify longer-term impacts of budget decisions. The November forecast updates the FY 2018-19 planning estimates from those prepared at the end of the 2015 legislative session. Revenue projections are based on IHS Economics' November baseline forecast for 2018 and 2019. Expenditure projections assume that current funding levels and policies continue unchanged, adjusted only for caseload and enrollment as well as specific formula driven changes.

### Planning Estimates: FY 2018-19 General Fund Budget

By Fiscal Year; November 2015 Forecast

| (\$ in millions)                     | FY 2018      | FY 2019        | FY 2018-19     |
|--------------------------------------|--------------|----------------|----------------|
| Forecast Revenues                    | \$22,830     | \$23,772       | \$46,603       |
| Projected Spending                   | 22,043       | 22,514         | 44,557         |
| <b>Structural Balance</b>            | <b>\$787</b> | <b>\$1,258</b> | <b>\$2,046</b> |
| <i>Estimated Inflation (CPI)</i>     | <i>\$573</i> | <i>\$1,121</i> | <i>\$1,694</i> |
| <i>Applied to Projected Spending</i> |              |                |                |

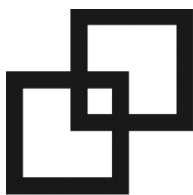
The table above shows forecast revenues and projected spending while excluding the impact of balances from prior years and reserves in order to highlight the structural balance or imbalance. In the 2018-19 biennium forecast revenues are expected to be \$2.064 billion higher than projected spending. The majority of expenditure projections do not include an adjustment for projected inflation. Projected inflation based on the Consumer Price Index is expected to be 2.6 percent in FY 2018 and 2.3 percent in FY 2019.

### Biennial Comparison: FY 2016-17 vs. FY 2018-19 General Fund Budget

November 2015 Forecast

| (\$ in millions)   | FY 2016-17 | FY 2018-19 | \$<br>Change | Annualized<br>%<br>Change |
|--------------------|------------|------------|--------------|---------------------------|
| Forecast Revenues  | \$42,718   | \$46,603   | \$3,884      | 4.4%                      |
| Projected Spending | 41,656     | 44,557     | 2,901        | 3.4                       |

The planning estimates are not intended to predict surpluses or deficits two or more years into the future. Rather their purpose is to assist in determining how well ongoing expenditures are likely to match future revenues based on trends in Minnesota's economy, and the level of spending that is needed to maintain programs. The FY 2018-19 planning estimates provide an important baseline against which the longer-term impacts and affordability of budget decisions in the 2016 legislative session can be measured.



## REVENUE OUTLOOK

### Current Biennium

Total general fund revenues for FY 2016-17 are now forecast to be \$42.718 billion, \$90 million (0.2 percent) more than the February forecast adjusted for law changes. Total tax revenues for the biennium are forecast to be \$40.905 billion, exceeding the prior estimate by \$102 million (0.2 percent). Higher expected general sales, corporate, and other taxes more than offset a decline in forecast individual income tax revenues. The forecast change is calculated after adjusting for 2015 tax legislation, which reduced forecast revenue by \$30 million.

#### Current Biennium: FY 2016-17 General Fund Revenues

End-of-Session vs. November 2015 Forecast Comparison

| (\$ in millions)           | End-of-Session  | November 2015<br>Forecast | \$<br>Change | %<br>Change |
|----------------------------|-----------------|---------------------------|--------------|-------------|
| Individual Income Tax      | \$22,067        | \$21,957                  | \$(110)      | (0.5)%      |
| General Sales Tax          | 10,940          | 11,031                    | 91           | 0.8         |
| Corporate Franchise Tax    | 2,576           | 2,644                     | 69           | 2.7         |
| State General Property Tax | 1,699           | 1,689                     | (9)          | (0.5)       |
| Other Tax Revenue          | 3,522           | 3,584                     | 62           | 1.8)        |
| <b>Total Tax Revenues</b>  | <b>\$40,803</b> | <b>40,905</b>             | <b>102</b>   | <b>0.3%</b> |
| Non-Tax Revenues           | 1,426           | 1,426                     | (0)          | (0.0)       |
| Other Resources            | 400             | 388                       | (12)         | (3.1)       |
| <b>Total Revenues</b>      | <b>\$42,629</b> | <b>\$42,718</b>           | <b>\$90</b>  | <b>0.2%</b> |

Revenues for FY 2016-17 are now expected to exceed their FY 2014-15 levels by \$2.686 billion (6.7 percent.) Total tax revenues are projected to be \$2.764 billion (7.2 percent) more than in FY 2014-15. Individual income and sales tax revenues account for nearly all of the biennial growth. Net corporate tax receipts in FY 2016-17 are lower than in the previous biennium. Smaller expected corporate payments and larger projected refunds both contribute to that change.

This is the first forecast of FY 2016-17 revenues since FY 2016 began on July 1. After four months of observed collections, fiscal year-to-date receipts are \$6.093 billion, or about 14 percent of the total expected over the biennium. With 20 months of FY 2016-17 collections left to observe, 86 percent of forecast receipts are outstanding.

**Biennial Comparison: FY 2014-15 vs. FY 2016-17 General Fund Revenues**

November 2015 Forecast

| (\$ in millions)           | <b>FY 2014-15</b> | <b>FY 2016-17</b> | <b>\$<br/>Change</b> | <b>%<br/>Change</b> |
|----------------------------|-------------------|-------------------|----------------------|---------------------|
| Individual Income Tax      | \$20,063          | \$21,957          | \$1,894              | 9.4%                |
| General Sales Tax          | 10,174            | 11,031            | 857                  | 8.4                 |
| Corporate Franchise Tax    | 2,733             | 2,644             | (89)                 | (3.3)               |
| State General Property Tax | 1,674             | 1,689             | 16                   | 0.9                 |
| Other Tax Revenue          | 3,496             | 3,584             | 87                   | 2.5                 |
| <b>Total Tax Revenues</b>  | <b>\$38,141</b>   | <b>40,905</b>     | <b>2,764</b>         | <b>7.2%</b>         |
| Non-Tax Revenues           | 1,474             | 1,426             | (48)                 | (3.2)               |
| Other Resources            | 418               | 388               | (30)                 | (7.2)               |
| <b>Total Revenues</b>      | <b>\$40,032</b>   | <b>\$42,718</b>   | <b>\$2,686</b>       | <b>6.7%</b>         |

**Individual Income Tax.** Individual income tax receipts are now forecast to be \$110 million (0.5 percent) less than the prior estimate. Lower forecast growth in both wage and non-wage income in each year from 2015 to 2017 offsets an increase in MMB's estimate of tax liability for 2014, the base year for this income tax forecast.

This forecast builds from MMB's estimate of final 2014 income tax liability. Using information from processed tax returns, revenue in the state accounting system, and projections of returns remaining to be received and/or processed, MMB economists estimate that final 2014 income tax liability is \$9.398 billion, \$146 million more than estimated in February.

At the close of FY 2015, net income tax revenue exceeded the forecast by \$358 million. Most of that additional revenue was due to higher than expected tax year 2014 liability. In November, using information about 2014 tax returns remaining to be processed and projections of returns expected to be received by year end, MMB economists increased their estimate of returns that were due refunds, thus reducing estimated tax year 2014 liability. (Most of the refunds are expected to be applied to tax year 2015 liability, rather than taken in cash.) Consequently, the change in MMB's estimate of tax year 2014 liability from February, \$146 million, is less than would be implied by the FY 2015 variance alone.

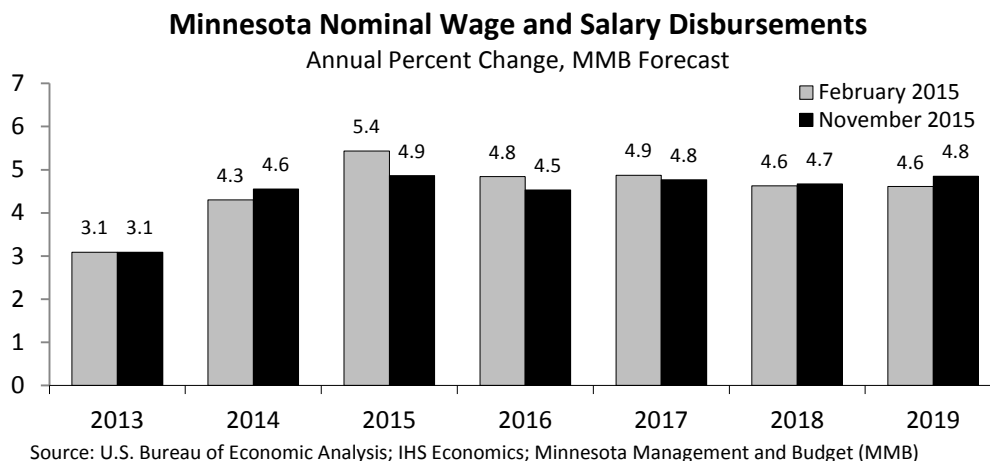
Calibrating the individual income tax model to produce MMB's estimated base year tax year liability generally requires making assumptions about base year growth rates for particular income types. In this forecast, to produce estimated 2014 tax liability, assumed 2014 growth in capital gains realizations by Minnesota residents was raised from 31.4 percent in the February forecast to 38.9 percent.

A lower forecast of income growth in tax years 2015 and 2016 offsets the higher base year income tax liability to lower the forecast for FY 2016-17 income tax revenues. Information from the Bureau of Economic Analysis (BEA), the Quarterly Census of Employment and Wages (QCEW), and income tax withholding collections suggest that Minnesota's growth in wage and salary income has been weaker than forecast in

February, and that slower wage income growth is forecast to continue. Annual wage growth in 2015 is now expected to be 4.9 percent, down from 5.4 percent in the February forecast. Annual wage growth in 2016 and 2017 is projected to be 4.5 and 4.8 percent, respectively, compared to 4.8 and 4.9 percent in the prior forecast.

Changes in expected growth in some other income types in calendar years 2015 and 2016 also reduce the FY 2016-17 income tax forecast. Compared to the February assumptions, capital gains realizations reported by Minnesota residents are now assumed to grow about 8.5 percentage points slower between 2014 and 2016. Expected growth in interest income is now 0.3 percent and 9.3 percent in 2015 and 2016, respectively, compared to 8.8 and 51.5 percent growth in February. (Note that when interest rates on bank deposits are very low, as they are in the U.S., even very small changes in rates can result in large percentage changes in interest income.) Finally, this forecast assumes a larger decrease in Schedule F farm income in 2015 than had been expected in February.

In addition to slower income growth, two other changes lower the FY 2016-17 income tax forecast. Higher actual inflation through August 2015 resulted in greater indexing of income tax brackets, reducing liability in tax year 2016. A new forecast of the impact of the Working Family Credit reduces tax liability in tax years 2015 through 2019.



*Minnesota's growth in wage and salary income has been weaker than forecast in February, and that slower wage income growth is forecast to continue.*

Several other changes add to the FY 2016-17 income tax forecast. A higher base for income taxes paid by fiduciaries and nonresident partnerships is not fully offset by lower growth, adding revenue to the forecast. MMB economists also estimated the additional revenue arising from one extra payday in 2015 for workers paid on Fridays. Finally, expectations for dividend and sole proprietorship income growth have been increased.

New information that is expected to become available between now and February 2016 may change the income tax forecast for FY 2016-17. In early January, MMB economists expect to learn the actual tax liability for 2014, the year on which this forecast is based. A significant variance between actual and estimated 2014 liability will change this forecast. Late January should bring new information about final estimated tax payments and the

final quarter of withholding for 2015, providing some clarity about tax year 2015 liability. Finally, in February, MMB economists expect to have the first information about 2014 growth rates in various income types—including capital gains—from a preliminary sample of 2014 tax returns. This should help identify income growth arising from sources that are unlikely to carry over to subsequent years.

**General Sales Tax.** Among the major tax types, the sales tax shows the largest dollar amount increase over the prior estimate, \$91 million (0.8 percent). This change reflects higher than expected sales tax receipts in FY 2015, which forms the base of this forecast, and stronger projected taxable sales growth in 2017. Gross sales tax receipts—net of the motor vehicle lease (MVL) transfer—are now anticipated to exceed the prior estimate by \$95 million, and the sales tax refund forecast has been lowered by \$3 million.

Since February, gross sales tax collections (net of the MVL transfer) have exceeded the prior forecast by \$78 million. Reducing this amount for a one-time payment leaves a variance of \$66 million, which raises the base for the current estimate. Minnesota's synthetic sales tax base, a proxy for the actual sales tax base, is now expected to grow faster in 2017 than had been assumed in February. The synthetic base is now expected to grow more slowly in 2016 than was assumed at the time of the prior forecast, but the slower near-term growth is not enough to offset the higher base and stronger 2017 growth.

**Corporate Franchise Tax.** A reduced corporate refund forecast together with higher expected gross tax payments raise expected net corporate tax revenues for FY 2016-17 by \$69 million (2.7 percent) above the prior estimate. Corporate refunds are now expected to be \$65 million lower than the prior estimate, and the gross corporate receipts forecast has been increased by \$4 million.

Gross corporate income tax receipts at the close of FY 2015 were \$86 million higher than previously forecast. Net corporate profits are now expected to fall 2.7 percent in 2015, compared to 4.4 percent growth assumed in February, and that weaker profit growth in 2015 is expected to continue into 2016. The lower profit growth, however, is not enough to offset the higher base, leading to a small increase in forecast gross receipts.

With this forecast, MMB is shifting from a methodology that directly projects corporate tax receipts to one that starts with an estimate of implied tax liability for calendar year 2014. MMB economists estimate total implied corporate tax liability to be \$1.33 billion, \$18 million less than estimated in February. Lower profit growth and lower base year liability reduce MMB's estimate of implied calendar year 2015 liability to \$1.365 billion, \$18 million less than in February.

The corporate income tax forecast includes an off-model adjustment for the impact of the Historic Structure Rehabilitation Credit (HSRC). MMB's practice is to forecast the full revenue impact of the HSRC (\$103 million in FY 2016-17) within corporate refunds, even though some of the credits accrue to non-corporate taxpayers, and some credits reduce tax payments, rather than increase refunds. Some credits that had been anticipated in FY 2015 are now expected to appear in FY 2016-17. This change in the timing of

HSRC activity raises the FY 2016-17 corporate refund forecast \$20.1 million over the prior estimate.

**Other Tax Revenue, Non-Tax Revenue, Other Resources.** Other tax revenue is now expected to exceed the prior estimate by \$62 million (1.8 percent). Among other taxes, the cigarette and tobacco tax shows the largest dollar amount change, \$67 million (5.6 percent) more than in February. The increased cigarette and tobacco revenue forecast is due to both higher taxable purchases and indexing-induced changes in the tax rate. Driven by a larger base, increased expectations for nominal home sales in FY 2017, and higher near-term refinancing activity, revenues from the mortgage registry and deed transfer taxes together are forecast to exceed the prior estimate by \$18 million. Lower than expected receipts from the insurance gross earnings tax in FY 2015 and the first quarter of FY 2016 reduce the forecast for this tax by \$47 million. The slowdown in Minnesota mining production has reduced the forecast for the taconite occupation tax. Revenue from the occupation tax is now expected to be \$31 million (90.9 percent) lower than the prior estimate.

## Planning Estimates

Total revenues for FY 2018-19 are estimated to be \$46.603 billion, an increase of \$3.884 billion (9.1 percent) over the current forecast for FY 2016-17 revenues. Total tax revenues for FY2018-19 are estimated to be \$44.976 billion, a 10.0 percent increase over FY 2016-17 forecast revenues.

### Biennial Comparison: FY 2016-17 vs. FY 2018-19 General Fund Revenues November 2015 Forecast

| (\$ in millions)           | FY 2016-17      | FY 2018-19      | \$<br>Change   | %<br>Change  |
|----------------------------|-----------------|-----------------|----------------|--------------|
| Individual Income Tax      | \$21,957        | \$24,733        | \$2,776        | 12.6%        |
| General Sales Tax          | 11,031          | 12,131          | 1,100          | 10.0         |
| Corporate Franchise Tax    | 2,644           | 2,667           | 22             | 0.8          |
| State General Property Tax | 1,689           | 1,756           | 66             | 3.9          |
| Other Tax Revenue          | 3,584           | 3,690           | 106            | 3.0          |
| <b>Total Tax Revenues</b>  | <b>40,905</b>   | <b>44,976</b>   | <b>4,071</b>   | <b>10.0%</b> |
| Non-Tax Revenues           | 1,426           | 1,392           | (34)           | (2.4)        |
| Other Resources            | 388             | 235             | (153)          | (39.4)       |
| <b>Total Revenues</b>      | <b>\$42,718</b> | <b>\$46,603</b> | <b>\$3,884</b> | <b>9.1%</b>  |

Together, the individual income and general sales taxes account for almost all of the projected biennial tax revenue growth. The individual income tax shows the largest increase, growing \$2.776 billion (12.6 percent), and contributing 68 percent of the total tax revenue biennial changes. The general sales tax estimate exceeds the FY 2016-17 forecast by \$1.100 billion (10.0 percent), accounting for 27 percent of the projected revenue growth. Projections for the corporate, state general property, and other taxes all show growth over the biennia.



The planning estimates for 2018-19 should be used with caution. First, the projections will be affected by any revenue changes in the enacted supplemental budget for the 2016-17 biennium. Second, changes in MMB's estimates of individual and corporate income tax liability for 2017 and 2018, as well as changes in the base levels of other revenue types for FY 2016 through FY 2017 will change the FY 2018-19 planning estimates. Third, even small deviations from assumed growth rates for factors affecting revenue will compound and produce sizable changes in revenues. Should the economy grow more slowly than forecast, or should some volatile income item such as capital gains or corporate profits fall well below forecast, the revenue outlook for FY 2018-19 will deteriorate. Finally, Minnesota's Council of Economic Advisers warn that the difficulty of projecting long range economic conditions warrants caution when using economic forecasts of 2018 and 2019.



## EXPENDITURE OUTLOOK

### Closed Biennium

The 2014-15 biennium ended with a positive general fund balance of \$632 million, \$585 million more than estimated at the end of the 2015 special legislative session. While the majority of this improvement was due to revenue changes, final fiscal year 2015 spending was slightly lower than end of session projections. Expenditures totaled \$20.293 billion, \$118 million (0.6 percent) lower compared to end of session estimates.

\$28 million of the expenditure savings at close are reflected in reduced health and human services spending. FY 2015 health and human services spending totaled \$6.191 billion, a reduction of 0.4 percent. Lower than anticipated Medical Assistance (MA) spending driven by lower than expected use of health care by new MA enrollees contributed to the savings.

Tax aids and credits spending was \$23 million (1.4 percent) lower than previous estimates largely due to homeowner property tax refund being lower than projected. The remainder of the general fund FY 2015 savings is attributed to unspent appropriations that carry forward for spending in the next biennium.

These savings are offset by slight increases in other areas of the budget. Spending in the environment area was \$7 million higher at close due to higher than expected Department of Natural Resources firefighting expenditures.

### Current Biennium

Spending estimates for the FY 2016-17 biennium are projected to be \$41.656 billion, which is \$178 million (0.4 percent) lower than previously expected. The table below shows forecast change in spending for the current biennium.

**Current Biennium: FY 2016-17 General Fund Expenditures**

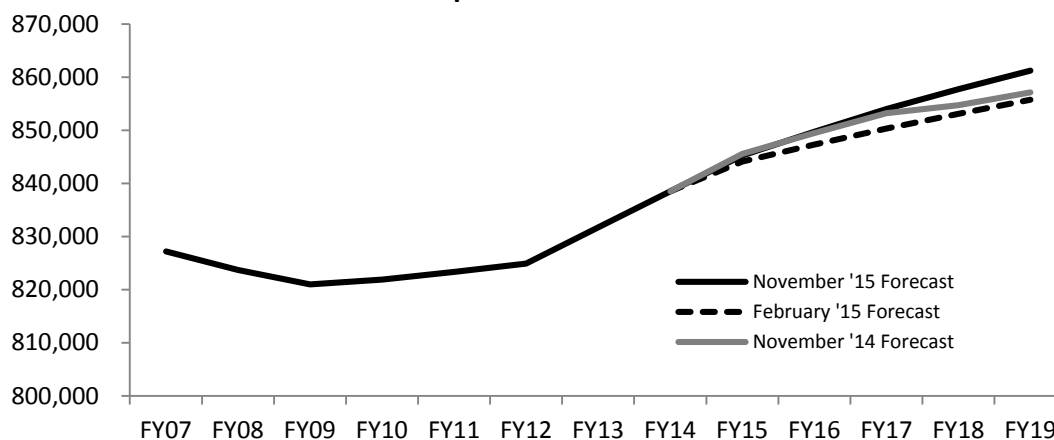
End-of-Session vs. November 2015 Forecast Comparison

| (\$ in millions)            | End-of-Session  | November 2015<br>Forecast | \$<br>Change   | %<br>Change   |
|-----------------------------|-----------------|---------------------------|----------------|---------------|
| E-12 Education              | \$17,236        | \$17,309                  | \$73           | 0.4%          |
| Property Tax Aids & Credits | 3,353           | 3,358                     | 6              | 0.2           |
| Health & Human Services     | 12,481          | 12,064                    | (416)          | (3.3)         |
| Debt Service                | 1,267           | 1,241                     | (27)           | (2.1)         |
| Forecast Allocations        | -               | 71                        | 71             | N/A           |
| All Other                   | 7,497           | 7,612                     | 115            | 1.5           |
| <b>Total Expenditures</b>   | <b>\$41,834</b> | <b>\$41,656</b>           | <b>\$(178)</b> | <b>(0.4)%</b> |

**E-12 Education.** Education finance is the largest category of state general fund spending, accounting for 42 percent of general fund spending. It consists of aid programs for general education, special education, early childhood and family education, charter schools, nonpublic pupil programs, and integration programs among others.

E-12 aids can be divided into two major funding streams: 1) general education, the primary source of basic operating funds for schools, and 2) categorical aid, tied to specific activities or categories of funding.

In the current biennium E-12 education spending is anticipated to be \$17.309 billion, an increase of \$73 million compared to end of session estimates. Both general education and categorical aids expenditures are forecast to increase. General education spending is expected to be \$64 million (0.5 percent) higher for FY 2016-17. While there are a variety of factors contributing to this forecast increase, growth in pupil counts, compared to February 2015, is the largest factor. The table and graph below show the recent history of estimated pupil growth.

**Minnesota Pupil Growth: FY 2007 to FY 2019**

The largest forecast increase in categorical aids occurs in special education. FY 2014 expenditures are used as the basis for special education aid calculations for FY 2015 and later. Actual special education expenditures were higher than the preliminary estimates used last February, which contributes to forecast increases for the current and upcoming biennia. As a result, expenditures are up \$14 million (0.6 percent) from end of session for FY 2016-17.

Additionally, a correction from the end of session resulted in an increase of \$3 million (1.6 percent) for FY 2016-17 for Alternative Compensation, also called “Q Comp”. Offsetting these increases, there is a \$5 million (3.5 percent) reduction in charter school lease aid compared to previous estimates due to a reduction in the total number of students anticipated to be served in charter schools. There were additional small changes in other categorical spending areas contributing to the overall net increase in E-12 categorical spending of \$9 million for FY 2016-17.

**Health and Human Services.** Health and Human Services is approximately one-third of total state general fund spending. The majority of these expenditures (85 percent) are forecast programs including Medical Assistance (MA), Chemical Dependency (CD), the Minnesota Family Investment Program (MFIP), MFIP Child Care, Alternative Care (AC), General Assistance, Group Residential Housing, Minnesota Supplemental Aid and Northstar Care for Children.

General fund forecast changes are generally driven by changes to the MA forecast, since it accounts for the largest portion of forecasted health and human services program expenditures. MA is for low-income individuals and families, persons with disabilities, and elderly individuals who are low-income or cannot afford needed long term care. MA costs are split between the state and federal government, though only the state share of expenditures is reflected as part of the general fund forecast.

Health and human services spending is forecast to be \$12.064 billion in FY 2016-17. This is a reduction of \$416 million (3.3 percent) relative to 2015 end of session estimates. The table below identifies major forecast expenditure changes from end of session estimates.

## FY 2016-17 General Fund Health and Human Services Expenditure Changes

End-of-Session vs. November 2015 Forecast

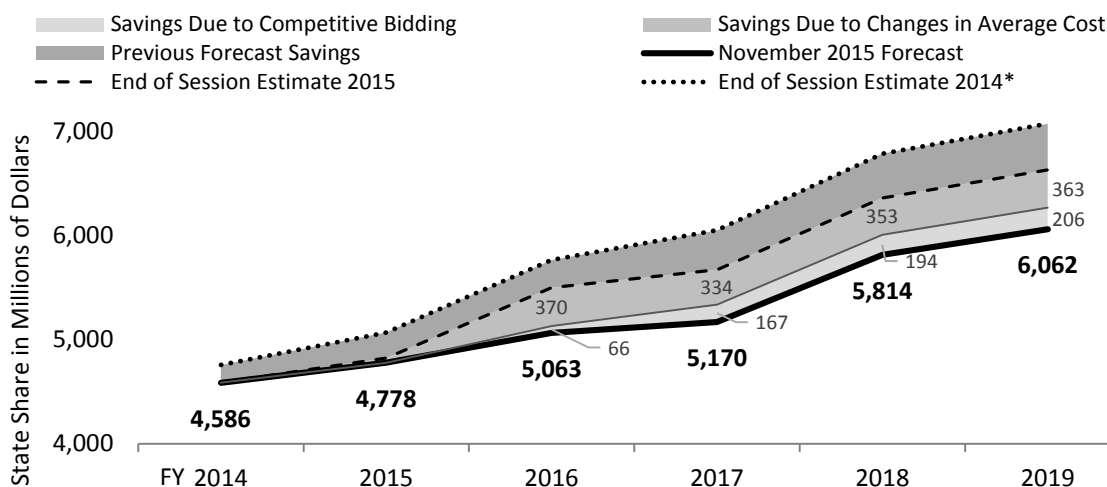
| Major Forecast Expenditure Changes (in millions)                   | \$<br>Change | %<br>Change  |
|--|--------------|--------------|
| Lower MA rates for families and children & adults without children | (350)        | (9.6)        |
| Lower MA rates & payments for elderly and disabled basic care      | (111)        | (4.0)        |
| All Other MA   | 46           |              |
| <b>Total MA Change</b>   | <b>(415)</b> | <b>(4.4)</b> |
| Chemical Dependency Entitlement Grants                             | 28           | 16.3         |
| Minnesota Family Investment Program (MFIP) Child Care              | (22)         | (10.5)       |
| All Other Non-MA   | (7)          |              |
| <b>Total Non-MA Change</b>   | <b>(1)</b>   | <b>(0.1)</b> |
| <b>Total HHS General Fund Forecast Change</b>                      | <b>(416)</b> | <b>(3.3)</b> |

*Medical Assistance Program.* Medical Assistance (MA) spending is forecast to be \$415 million lower than end of session estimates, a 4.4 percent reduction. Lower rates paid to managed care organizations for families with children and adults without children result in a \$350 million reduction in forecast MA expenditures. Of this, \$158 million is attributable to general fund savings from competitive bidding. The cost of basic care for the elderly and people with disabilities has also experienced slower than expected growth in recent years. This leads to a \$111 million reduction in forecast MA expenditures in the FY 2016-17 biennium.

The chart below illustrates changes across funds in state expenditures for MA and MinnesotaCare. In the FY 2016-17 biennium, forecast spending for these programs is \$937 million below end-of-session estimates, \$234 million of which is due to competitive bidding. The use of statewide competitive bidding is discussed in greater detail later in this section.

## Forecast Changes in State Health Care Spending Over Time

General Fund and Health Care Access Fund Spending on MA and MinnesotaCare



\*2018 and 2019 estimates for 2014 End of Session series are extrapolated based on current trends.

*Non-MA Spending.* Forecast spending across all non-health care programs decreased \$1 million (0.1 percent) for the FY 2016-17 biennium. MFIP Child Care is forecast to be \$22 million (10.5 percent) below end of session estimates in the FY 2016-17 biennium. A large portion of the reduction is the result of FY 2015 actual expenditures being \$13 million less than expected, allowing the federal share to be shifted into FY 2016, and lowering state spending in the current biennium.

One area of forecast growth is in Chemical Dependency (CD) entitlements, which is increased by \$28 million (16.3 percent) in the FY 2016-17 biennium over end of session estimates. \$23 million of this change is due to higher room and board payments to residential treatment providers following a change in payment methodology.

**Property Tax, Aids, and Credits.** Property tax aids and credits are approximately eight percent of general fund spending. They are paid to local governments, including cities, counties, towns, public schools, and special taxing districts. These aids and credits help offset costs of service delivery, defray costs of state mandates, and reduce local property taxes by substituting state funds for revenues that would otherwise need to be raised locally. Direct payments to individuals, like property tax refunds for homeowners and renters, are also included in this category because they reduce property tax burdens.

FY 2016-17 spending for property tax aids and credits is forecast to be \$3.358 billion. This is \$6 million higher than end of session estimates, a change of less than 0.2 percent. However, there are some larger offsetting changes behind this number. Homeowners and renters property tax refunds are up by \$14 million (1.1 percent) relative to end of session estimates as the growth in property tax levies outpaces income growth. Spending on local fire aid is increased by \$5 million (8.5 percent) due to a corresponding increase in tax revenue from homeowner's insurance premiums. These increases are somewhat offset by a \$5 million (31.3 percent) reduction in the targeted property tax refund program, a \$3 million (10.7 percent) reduction in tax refund interest payments, and a \$2 million (1.45 percent) reduction in local police aids.

**Debt Service.** Projected debt service costs for FY 2016-17 are expected to be \$1.241 billion, down \$27 million from the end of session estimates. Current legislation allows MMB to use premiums paid by bond purchasers to lower the size of the bond issues. Market conditions at the time of the August 2015 bond sale resulted in a lower interest rate and a higher bond premium than previously estimated. As a result, the size of the bond issue was lowered, along with the debt service payments. This resulted in approximately \$21 million in savings in FY 2016-17. In addition, an August 2015 bond refunding lowered debt service costs by \$6 million. Slightly higher investment earnings overall also contributed to the savings.

**All Other Spending Changes.** Collectively, all other spending in the FY 2016-17 biennium is projected to be \$7.683 billion, \$186 million higher than end of session estimates. This is primarily the result of two factors. The first factor is \$94 million of appropriations carried forward from FY 2015, which increases spending in FY 2016-17. The second factor is \$93 million of transfers enacted during the 2015 regular and special

### Impact of Statewide Competitive Bidding for 2016 Managed Care Contracts

Minnesota's public health care programs contract with managed care organizations to deliver coverage to many public program enrollees. In 2015, the Department of Human Services (DHS) implemented statewide competitive bidding for 2016 managed care contracts for portions of Medical Assistance (MA) and MinnesotaCare. The contracts that were bid provide coverage to more than 800,000 people. In the competitive bidding process, managed care organizations submit bids that are scored on a variety of factors such as price, quality, and provider availability. The responses that DHS received resulted in lower than expected managed care rates. These rates lead to sizable reductions in forecast expenditures compared to previous estimates.

DHS estimates that, in total and across all funds, these contracts will result in \$605 million in lower managed care payments during the FY 2016-17 biennium. Savings are forecast to continue beyond the 2016 contract year because the base for future rate setting has been lowered dramatically. The table below details the estimated savings from the competitive bidding by payer, fund, and time period.

#### Forecast Changes Attributable to Statewide Competitive Bidding

|  | <u>FY 2016-17</u> | <u>FY 2018-19</u> |
|--|-------------------|-------------------|
| MA Families with Children                                  | (309)             | (506)             |
| MA Adults without Children                                 | (221)             | (352)             |
| <b>Total MA Savings</b>                                    | <b>(530)</b>      | <b>(858)</b>      |
| Federal Share of MA Savings                                | (371)             | (584)             |
| <b>State General Fund Savings</b>                          | <b>(158)</b>      | <b>(274)</b>      |
| <b>MinnesotaCare Savings<br/>(Health Care Access Fund)</b> | <b>(75)</b>       | <b>(126)</b>      |
| <b>Total Savings</b>                                       | <b>(605)</b>      | <b>(984)</b>      |
| <b>Total State Savings</b>                                 | <b>(234)</b>      | <b>(400)</b>      |

Note: Managed care contracts are made for calendar years. The estimated total savings for calendar year 2016 is \$473 million, and the estimated state savings is \$174 million.

Because MA is jointly funded by the federal government, lower rates result in both state and federal savings. The share of savings is proportionate to the share of costs borne by each payer. For MA Families with Children, the federal share is approximately 50 percent. For MA Adults without Children, the federal share is 100 percent in 2016 and falls to 93 percent by the end of the FY 2018-19 biennium. Approximately 30 percent (\$158 million in FY 2016-17) of total Medical Assistance savings are to the state. Unlike MA, all MinnesotaCare savings accrue to the state due to the method used to determine the federal payment.

In addition, state savings occur in multiple funds. State savings in MA lower spending in the general fund (\$158 million in FY 2016-17), while savings to MinnesotaCare lower spending in the health care access fund (\$75 million in FY 2016-17).

sessions that either repay funds used in the enacted budget, or provide funding for accounts that were not included in the adopted budget.

Chapter 65 from the 2015 regular legislative session amended M.S. 16A.152 to direct MMB to transfer \$63 million to the closed landfill investment fund and \$8 million metropolitan landfill contingency action trust account if a positive unrestricted general fund budgetary balance is forecast at the end of the biennium.

Chapter 65 from the 2015 regular legislative session and chapter 4 from the 2015 special legislative session also direct MMB to transfer \$19 million to the disaster contingency account and \$3 million to fire safety account in the special revenue fund in FY 2016 if the FY 2015 closing balance is at least \$17.5 million greater than the balance previously projected at the end of session.

Both conditions identified above are met in this forecast, so all transfers are included in FY 2016-17 spending estimates.

Additionally, the Department of Natural Resources' open firefighting appropriation is increased by \$10 million relative to end of session estimates.

Finally, state aid payments for the Destination Medical Center have been adjusted in this forecast. The private investment that triggers state aid is occurring more slowly than previously anticipated. As a result, the first year of state aid will be paid in FY 2018, one year later than previously forecast.

## Planning Estimates

Compared to end of session estimates, statewide spending in FY 2018-19 is expected to be \$437 million (1 percent) lower. The largest driver of this change is a \$542 million reduction to Health and Human Services spending, which is somewhat offset by a \$111 million increase in E-12 Education.

### Planning Estimates: FY 2018-19 General Fund Expenditures

End-of-Session vs. November 2015 Forecast Comparison

| (\$ in millions)            | End-of-Session  | November 2015<br>Forecast | \$<br>Change   | %<br>Change   |
|-----------------------------|-----------------|---------------------------|----------------|---------------|
| E-12 Education              | \$18,003        | \$18,114                  | \$111          | 0.6%          |
| Property Tax Aids & Credits | 3,452           | 3,446                     | (6)            | (0.2)         |
| Health & Human Services     | 14,828          | 14,286                    | (542)          | (3.7)         |
| Debt Service                | 1,207           | 1,207                     | (1)            | 0.0           |
| All Other                   | 7,504           | 7,505                     | 1              | 0.0           |
| <b>Total Expenditures</b>   | <b>\$44,994</b> | <b>\$44,557</b>           | <b>\$(437)</b> | <b>(1.0)%</b> |

**E-12 Education.** Increases compared to end of session estimates seen in the current biennium largely continue in the planning years. Both general education and categorical aids expenditures are forecast to increase in the current and upcoming biennia. General



education spending is expected to be \$86 million (0.6 percent) higher than end of session estimates for FY 2018-19, again driven primarily by increased pupil counts.

Growth in special education aids and the Alternative Compensation correction noted previously also have an impact in FY 2018-19. Special education aids are up \$23 million (0.9 percent) for FY 2018-19 compared to end of session, and the Alternative Compensation correction adds \$7 million (3.7 percent) of expenditures in FY 2018-19. The forecast reduction in charter school lease aid also continues with a reduction of \$7 million (4.1 percent) compared to previous estimates. Other small changes contribute to the total net change of \$111 million.

**Health and Human Services.** In FY 2018-19, overall general fund HHS spending is down \$542 million (3.7 percent) compared to end of session estimates. As in the current biennium, changes to MA drive the reduction with a decrease of \$546 million (5.8 percent) from end of session.

Many of the trends impacting HHS spending in the FY 2016-17 biennium continue to impact spending estimates in the FY 2018-19 biennium. Lower managed care rates for families with children and adults without children result in \$580 million in savings, and lower average payments for elderly and disabled basic care result in \$144 million in forecast savings. These savings are slightly offset by higher enrollment among families with children (\$50 million) and higher payments to the federal government for Medicare Part B premiums and for Medicare Part D for enrollees that are also eligible for Medicare (\$57 million).

Spending within non-health care programs is \$4 million higher than end of session estimates. Northstar Care is expected to increase \$40 million (36.1 percent) over previous session estimates. Increases in caseload for foster care and adoption assistance programs account for approximately half of the increase, while an increase in average payments in the kinship assistance program accounts for the remainder. CD entitlements are also forecast to grow \$40 million in the FY 2018-19 biennium. Lower federal share resulting from a reclassification of some residential facilities accounts for a majority of the increase. These anticipated increases are mostly offset by \$68 million in lower spending in MFIP and Group Residential Housing (\$48 million and \$20 million, respectively). Most of the MFIP reduction (\$41 million) is due to increased use of federal funds in the planning years, which lowers state spending.

**Property Tax, Aids, and Credits.** A reduction of \$6 million (0.2 percent) relative to end of session is forecast in the property tax aids and credits area. While the increases seen in local fire aid in FY 2016-17 continue into the planning years, growth moderates in the homeowners and renters refund programs and both eventually show a slight reduction in FY 2019 compared to end of session. As seen in the current biennium, the targeted property tax refund program, tax refund interest, and local police aids are reduced in the planning biennium as well, leading to the slight overall reduction relative to previous estimates.

**Debt Service.** The forecast debt service costs for FY 2018-19 show minimal change from the end of session estimates. The forecast assumes future capital budgets of \$800 million in each even-numbered legislative session and \$230 million in each odd-numbered session.

## Biennial Growth

Total state expenditures are anticipated to grow by \$2.901 billion from FY 2016-17 to FY 2018-19. The vast majority of this change is in the Health and Human Services and E-12 Education areas (see the table below). In addition to these large drivers of spending growth, small growth is expected in property tax aids and credits area (\$87 million), which is slightly offset by reductions in debt service (\$34 million) and other areas of state spending (\$179 million).

### Biennial Growth: General Fund Expenditures

FY2016-17 vs. FY 2018-19

| (\$ in millions)          | November 2015<br>FY 2016-17 | November 2015<br>FY2018-19 | \$<br>Difference |
|---------------------------|-----------------------------|----------------------------|------------------|
| E-12 Education            | \$17,309                    | \$18,114                   | \$805            |
| Health & Human Services   | 12,064                      | 14,286                     | 2,222            |
| All Other                 | 12,282                      | 12,157                     | (126)            |
| <b>Total Expenditures</b> | <b>\$41,656</b>             | <b>\$44,557</b>            | <b>\$2,901</b>   |

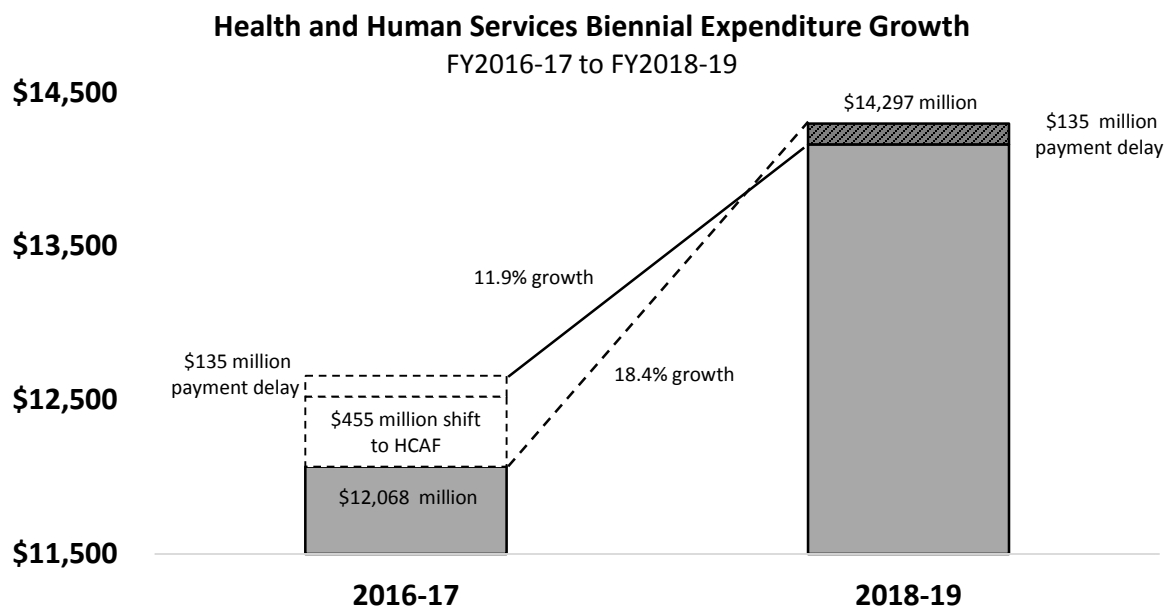
**E-12 Education.** E-12 expenditures in FY 2018-19 are projected to be \$805 million higher compared to the current biennium. The largest share of growth, nearly \$341 million, comes from general education. Growth in total pupil counts drives a portion of this change, along with changes in the enacted budget. The FY 2016-17 biennial budget added two percent each year to the basic formula in general education, provided greater operating capital levy equalization aid beginning in FY 2017, and replaced the statewide Student Achievement levy with state aid beginning in FY 2018, resulting in additional growth in FY 2018-19.

Several categorical aids also contribute to biennial growth. Special education spending is anticipated to be \$281 million (12 percent) higher in FY 2018-19. This level of increase is typical because the special education formula funds some inflationary growth of costs and increased pupils. As a result of policy changes enacted by the 2015 legislature, additional E-12 programs will see significant growth compared to FY 2016-17. The long term facilities maintenance aid formula, which begins in FY 2017, consolidates several other existing facilities funding streams, and increases facilities funding. Facilities funding in FY 2018-19 will increase by \$105 million (82 percent) compared to the current biennium. Finally, two early education programs received funding increases in the 2015 legislative session that were larger in the second year of the current biennium. Funding for early learning scholarships in FY 2018-19 will increase \$16 million (15 percent) and school readiness will increase \$12 million (22 percent) over FY 2016-17 levels.

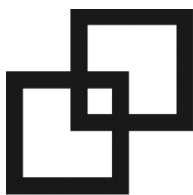
**Health and Human Services.** HHS Spending in FY 2018-19 is expected to grow \$2.222 billion compared to FY 2016-17. Though spending estimates are reduced in both the current and next biennium relative to previously forecasted amounts, HHS spending continues to grow year over year. As shown in the graph below, general fund spending is expected to grow by 18.4 percent from the FY 2016-17 biennium to the FY 2018-19 biennium.

Most of this growth (92.8 percent) is a result of increased spending for Medical Assistance, which is expected to grow \$2.063 billion (22.8 percent). Elderly and disabled basic care is forecast to increase by \$575 million from the current biennium. Expenditures for long-term care (facilities and waivers) are expected to grow by \$626 million from FY 2016-17 to the FY 2018-19 biennium as increased demand for long term care services continues.

Growth in the general fund share of MA spending is not representative of the program's growth across all funds. The total state share of MA is forecast to grow \$1.659 billion (16.7 percent). However, the general fund share grows by a greater extent due to a one time shift in MA expenditures to the Health Care Access Fund in 2016 and the delay of payments to managed care organizations from FY 2017 to FY 2018. As shown in the chart below, these two factors lower spending in FY 2016-17 and lead to higher general fund spending growth in the FY 2018-19 biennium. Accounting for these shifts, spending growth from one biennium to the next is 11.9 percent.



**All Other Spending.** Non-health care spending is expected to grow \$166 million (5.5 percent) from the FY 2016-17 biennium to the FY 2018-19 biennium. The biggest driver of this change is Northstar Care for Children, which is forecast to increase by \$54 million (56 percent) in the next biennium.



## APPENDIX

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## 2015 Minnesota Statutes 16A.152

**16A.152 BUDGET RESERVE AND CASH FLOW ACCOUNTS.**

Subdivision 1. **Cash flow account established.** A cash flow account is created in the general fund in the state treasury. Amounts in the cash flow account shall remain in the account until drawn down and used to meet cash flow deficiencies resulting from uneven distribution of revenue collections and required expenditures during a fiscal year.

Subd. 1a. **Budget reserve.** A budget reserve account is created in the general fund in the state treasury. The commissioner of management and budget shall transfer to the budget reserve account on July 1 of each odd-numbered year any amounts specifically appropriated by law to the budget reserve.

Subd. 1b. **Budget reserve level.** (a) The commissioner of management and budget shall calculate the budget reserve level by multiplying the current biennium's general fund non-dedicated revenues and the most recent budget reserve percentage under subdivision 8.

(b) If, on the basis of a November forecast of general fund revenues and expenditures, the commissioner of management and budget determines that there will be a positive unrestricted general fund balance at the close of the biennium and that the provisions of subdivision 2, clauses (1), (2), (3), and (4), are satisfied, the commissioner shall transfer to the budget reserve account in the general fund the amount necessary to increase the budget reserve to the budget reserve level determined under paragraph (a). The amount of the transfer authorized in this paragraph shall not exceed 33 percent of the positive unrestricted general fund balance determined in the forecast.

Subd. 2. **Additional revenues; priority.** (a) If on the basis of a forecast of general fund revenues and expenditures, the commissioner of management and budget determines that there will be a positive unrestricted budgetary general fund balance at the close of the biennium, the commissioner of management and budget must allocate money to the following accounts and purposes in priority order:

(1) the cash flow account established in subdivision 1 until that account reaches \$350,000,000;

(2) the budget reserve account established in subdivision 1a until that account reaches \$810,992,000;

(3) the amount necessary to increase the aid payment schedule for school district aids and credits payments in section 127A.45 to not more than 90 percent rounded to the nearest tenth of a percent without exceeding the amount available and with any remaining funds deposited in the budget reserve; and

(4) the amount necessary to restore all or a portion of the net aid reductions under section 127A.44 and to reduce the property tax revenue recognition shift under section 123B.75, subdivision 5, by the same amount.

(b) The amounts necessary to meet the requirements of this section are appropriated from the general fund within two weeks after the forecast is released or, in the case of transfers under paragraph (a), clauses(3) and (4), as necessary to meet the appropriations schedules otherwise established in statute.

(c) The commissioner of management and budget shall certify the total dollar amount of the reductions under paragraph (a), clauses (3) and (4), to the commissioner of education. The commissioner of education shall increase the aid payment percentage and reduce the property tax shift percentage by these amounts and apply those reductions to the current fiscal year and thereafter.

**Subd. 8. Report on budget reserve percentage.** (a) The commissioner of management and budget shall develop and annually review a methodology for evaluating the adequacy of the budget reserve based on the volatility of Minnesota's general fund tax structure. The review must take into consideration relevant statistical and economic literature. After completing the review, the commissioner may revise the methodology if necessary. The commissioner must use the methodology to annually estimate the percentage of the current biennium's general fund no dedicated revenues recommended as a budget reserve.

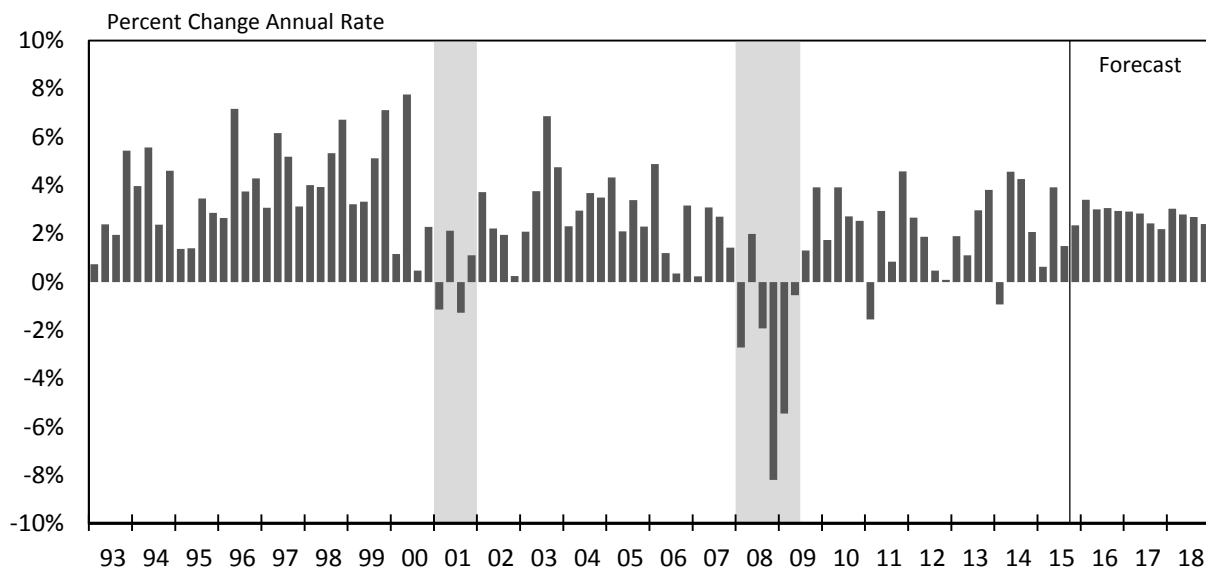
(b) By January 15 of each year, the commissioner shall report the percentage of the current biennium's general fund non-dedicated revenue that is recommended as a budget reserve to the chairs and ranking minority members of the legislative committees with jurisdiction over the Department of Management and Budget. The report must also specify:

(1) whether the commissioner revised the recommendation as a result of significant changes in the mix of general fund taxes or the base of one or more general fund taxes;

(2) whether the commissioner revised the recommendation as a result of a revision to the methodology; and

(3) any additional appropriate information.

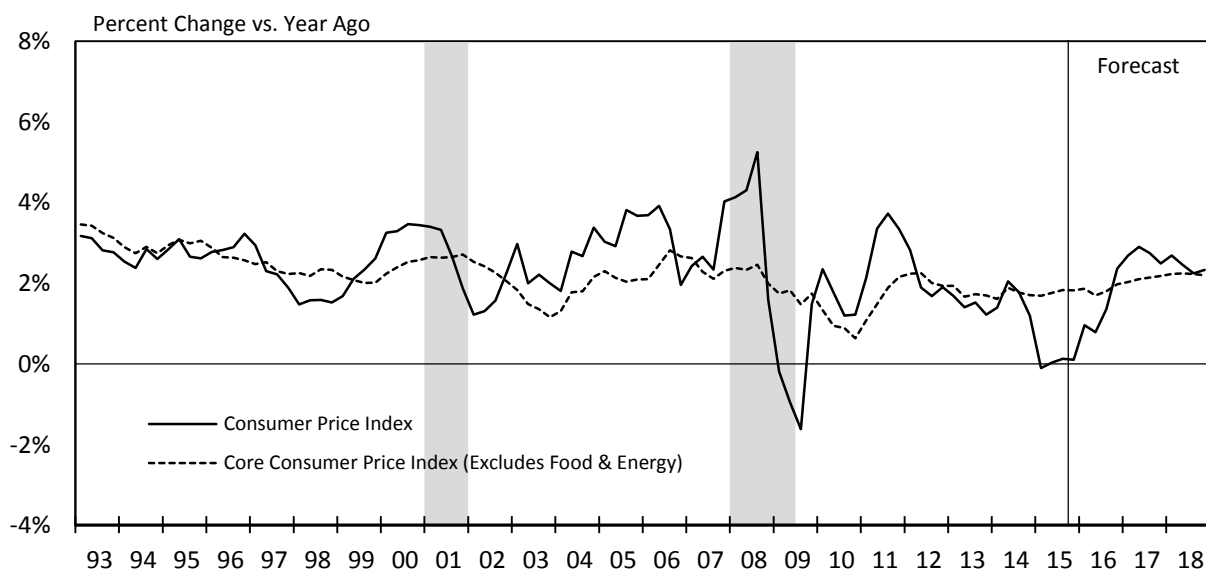
## Real Gross Domestic Product



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*Transitory influences – a strengthening dollar and lower oil prices – are reshaping overall economic activity this year. Nonetheless, the U.S. economy is weathering their adverse effects reasonably well. IHS Economics (IHS) expects real GDP growth to pick up from 2.4 percent in 2015, to 2.9 percent in 2016 and 2.8 percent in 2017.*

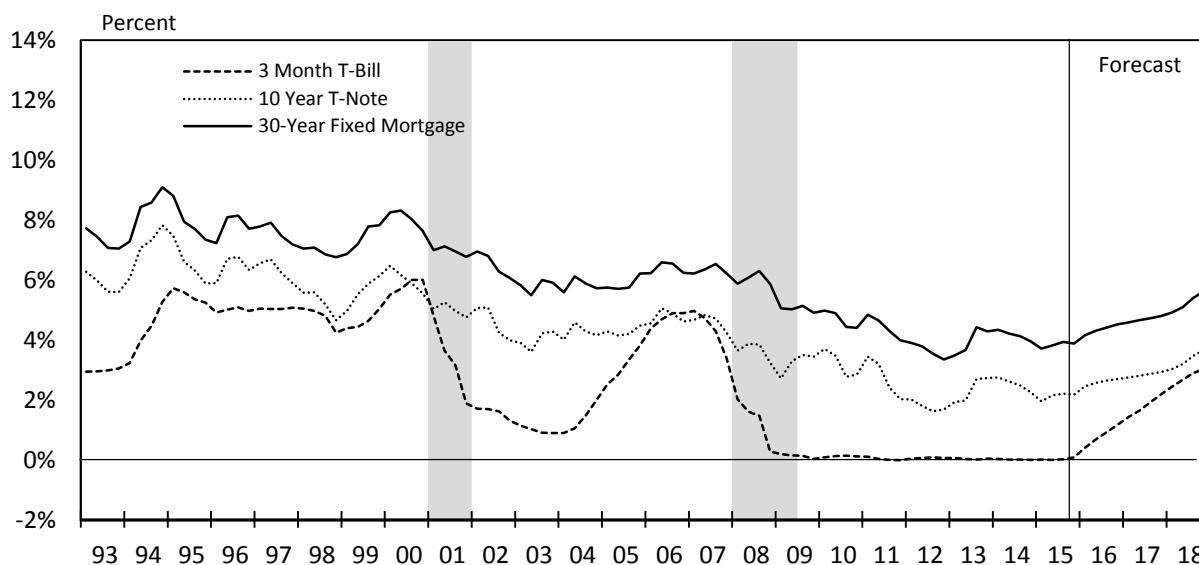
## Consumer Price Indexes



Source: Bureau of Labor Statistics, National Bureau of Economic Research, and IHS Economics

*Inflation is following an expected lower path this year, as lower-priced gasoline, industrial commodities, and imported consumer goods have put further downward pressure on already low inflation.*

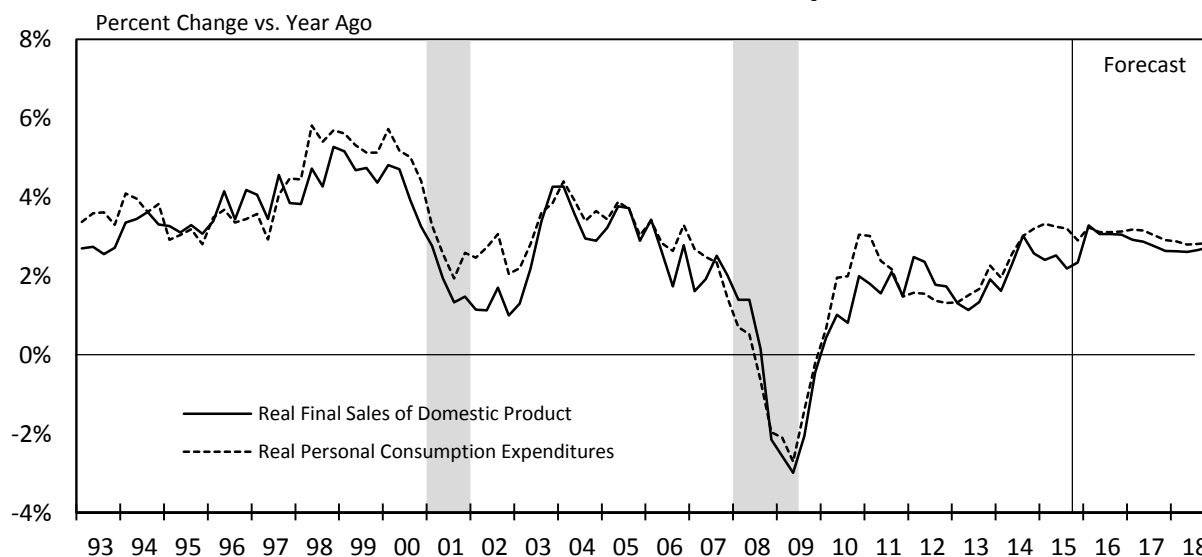
## Interest Rates



Source: Federal Reserve Board, Freddie Mac, National Bureau of Economic Research, and IHS Economics

*The Federal Reserve is expected to soon begin normalizing short-term interest rates from their near-zero level. The coming Fed rate hikes risk triggering abrupt changes in market expectations. That, in turn, could prompt a spike in long-term interest rates.*

## Real Final Sales & Consumption

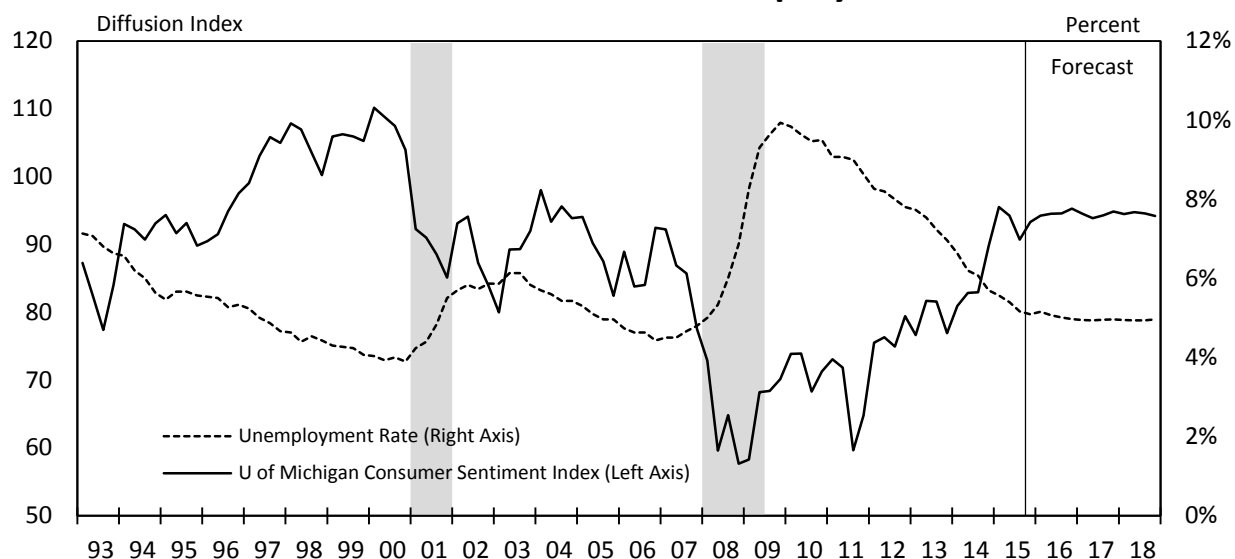


Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*Solid economic fundamentals for the consumer are fueling ramped up spending growth. IHS expects real consumer spending growth to hold steady at a solid 3.2 percent in 2016 and 3.1 percent in 2017, led by autos and other big-ticket durable items.*



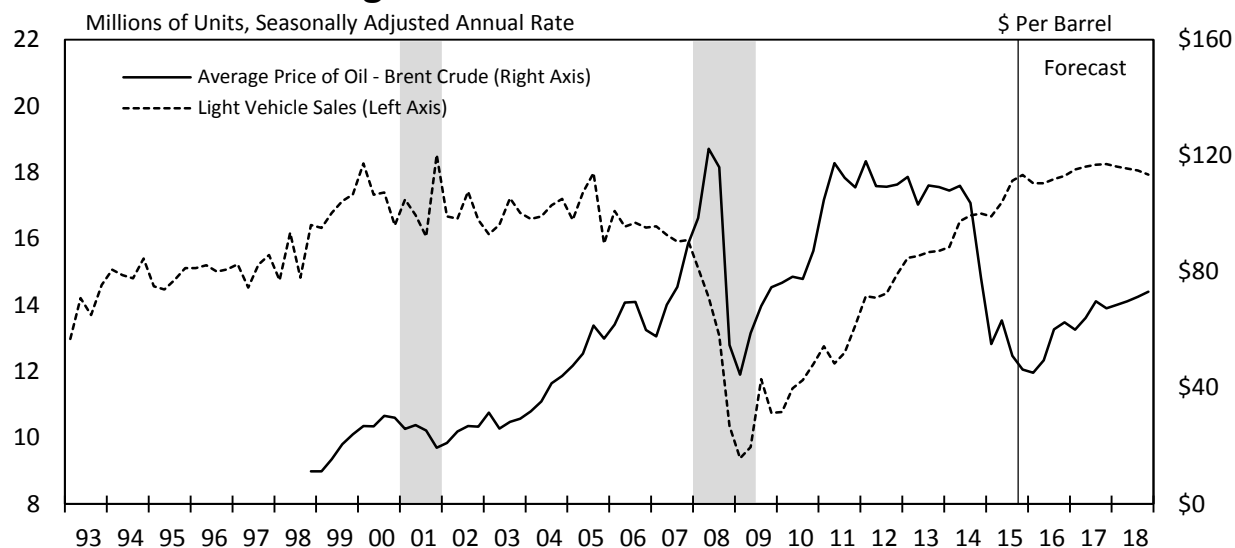
## Consumer Sentiment and Unemployment Rate



Source: University of Michigan, Bureau of Labor Statistics, National Bureau of Economic Research, and IHS Economics

*The job market continues to make solid progress and improving demand is quickly absorbing remaining labor market slack. The U.S. jobless rate is down to a near-normal 5.0 percent in October.*

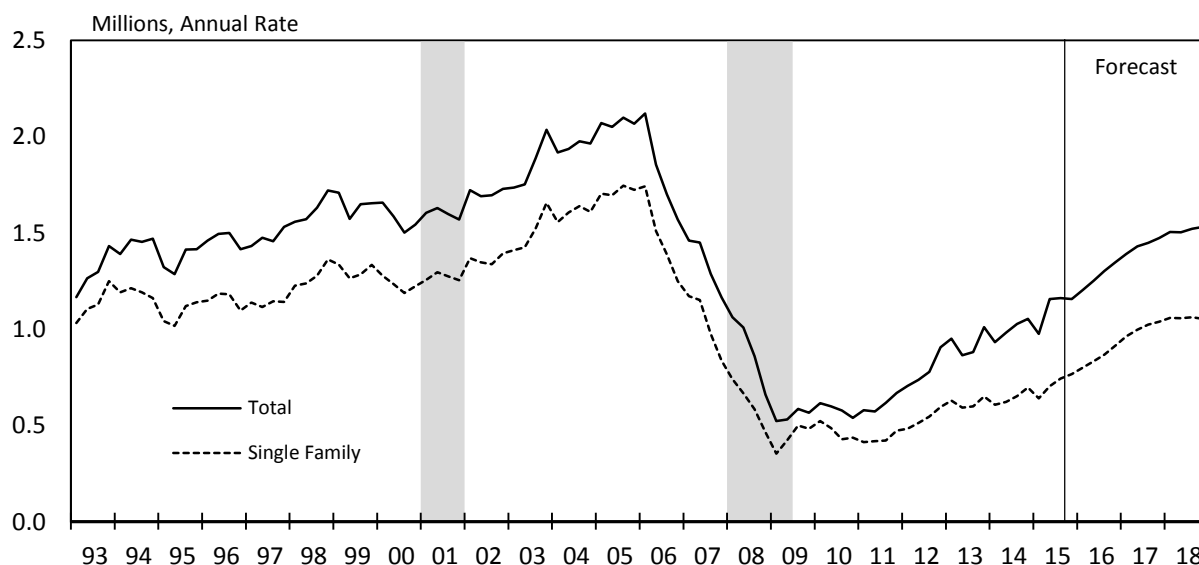
## Light Vehicle Sales and Oil Prices



Source: Bureau of Economic Analysis, Investors' Business Daily, National Bureau of Economic Research, and IHS Economics

*Brent oil prices have fallen by more than half in the past 18 months, from \$112/barrel in June 2014 to around \$46/barrel in mid-November 2015. Cheap oil means big savings for consumers and businesses that use petroleum products, but lower investment among energy producers.*

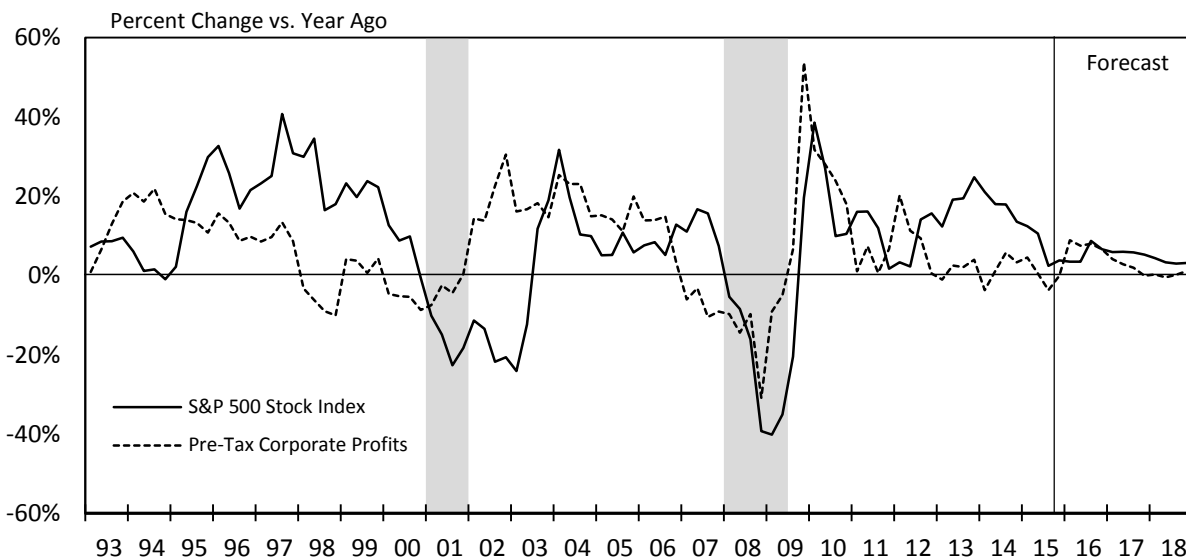
## Housing Starts



Source: U.S. Census Bureau, National Bureau of Economic Research, and IHS Economics

*The construction of new homes has not kept pace with rising demand. IHS expects 1.11 million housing starts this year, up from 1.0 million in 2014, but still well below long-term annual average of roughly 1.5 million starts prior to the recession.*

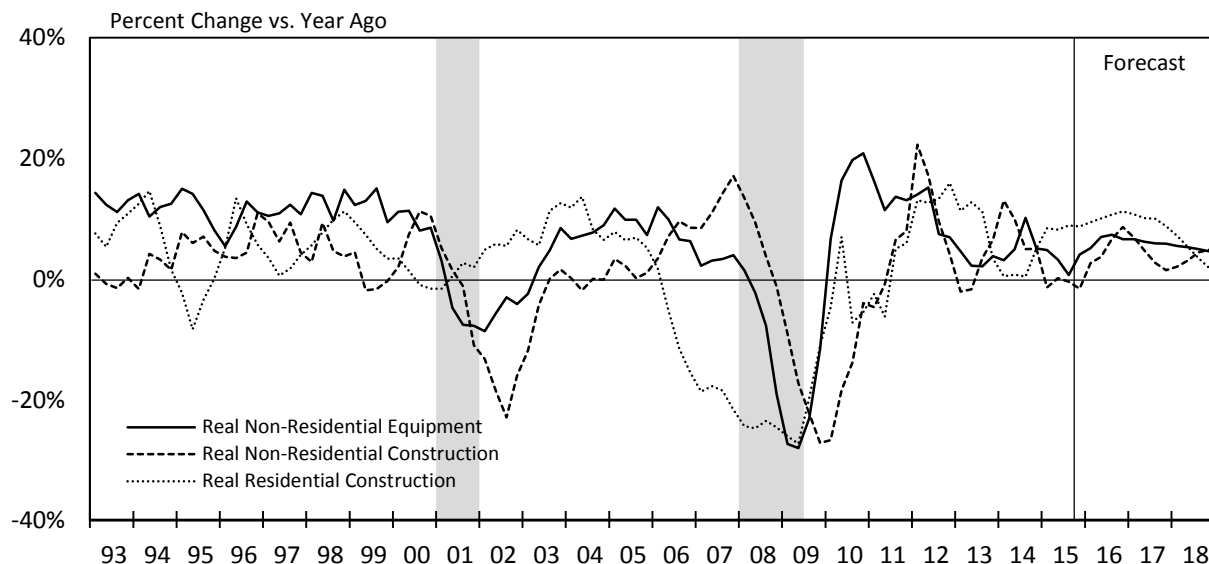
## S&P 500 Stock Index and Pre-Tax Corporate Profits



Source: Standard and Poor's, National Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*U.S. household wealth is climbing amid rising home values and stock prices. National house prices are now back to what they were before nationwide home values began to unravel in early 2007. And the Dow Jones industrial average and S&P 500 set all-time highs last spring.*

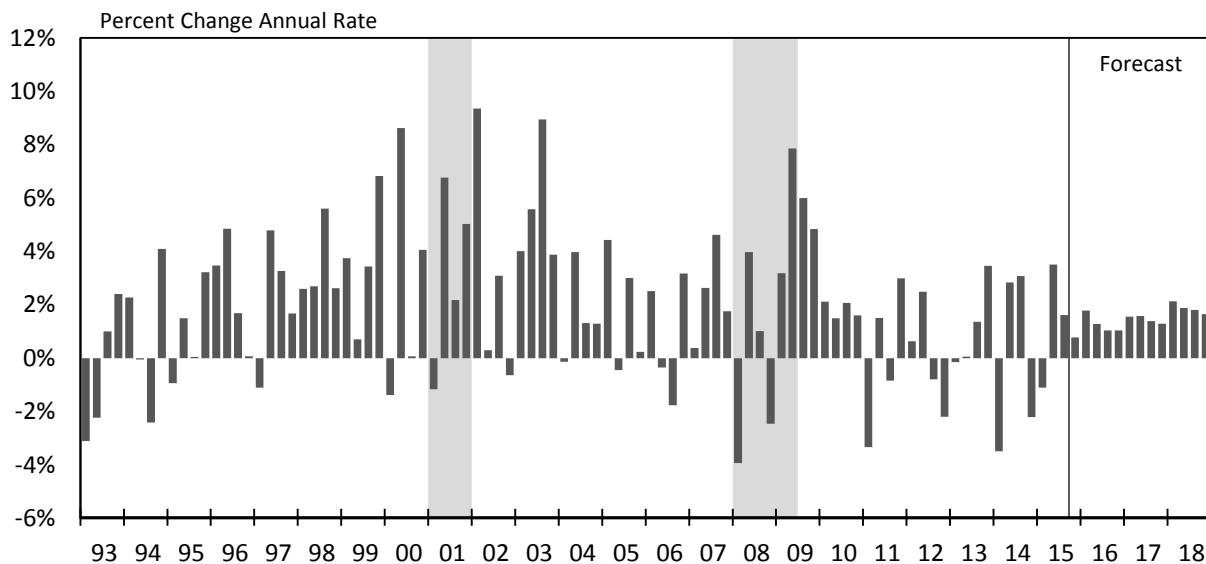
## Real Private Investment



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*A slower pace of investment growth this year is attributable to the stronger dollar and a falloff in drilling activity. Some of the broader disconnect, however, likely has to do with the impact of new technologies as well as firms' expectations of future profitability.*

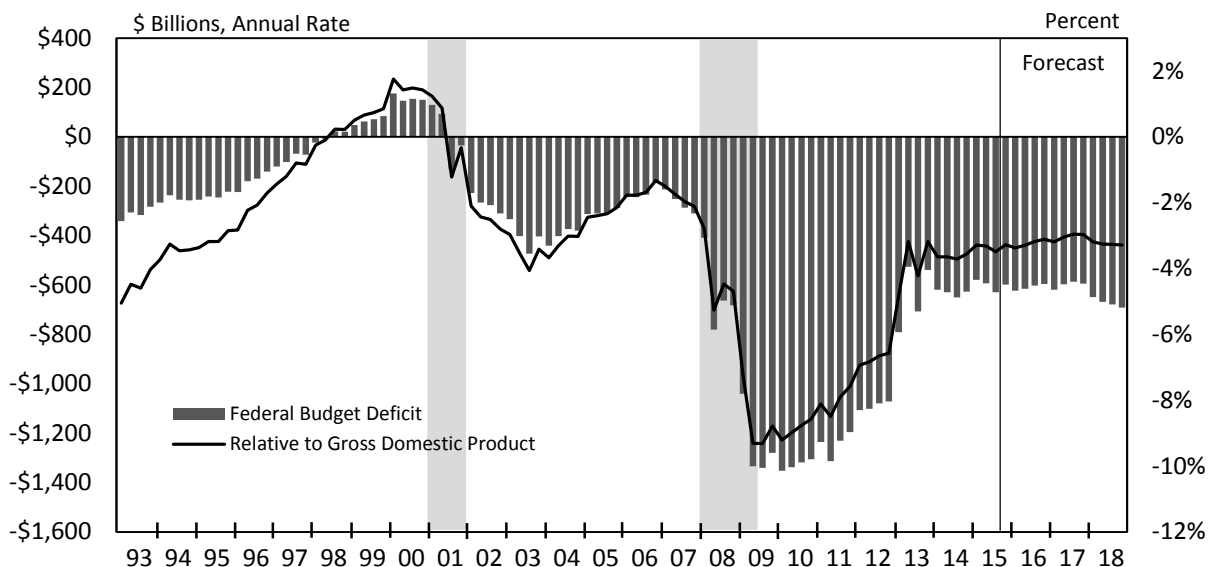
## Total Non-Farm Productivity



Source: Bureau of Labor Statistics, National Bureau of Economic Research, and IHS Economics

*Business investment in new labor-saving equipment and technologies is an important contributor to productivity growth. Thus the investment slowdown helps explain why productivity gains have stalled in recent years.*

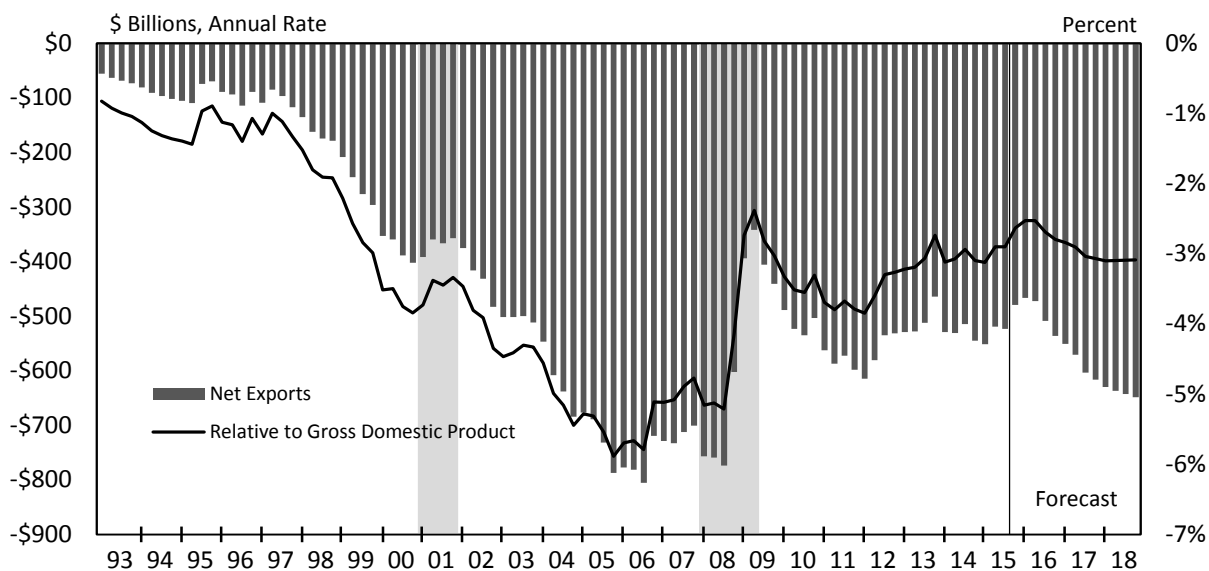
## Federal Budget Deficit (NIPA Basis)



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*The U.S. Treasury Department concludes that the federal government deficit shrank to \$439 billion in FY 2015, nearly \$46 billion less than the shortfall from 2014 and the smallest since 2007.*

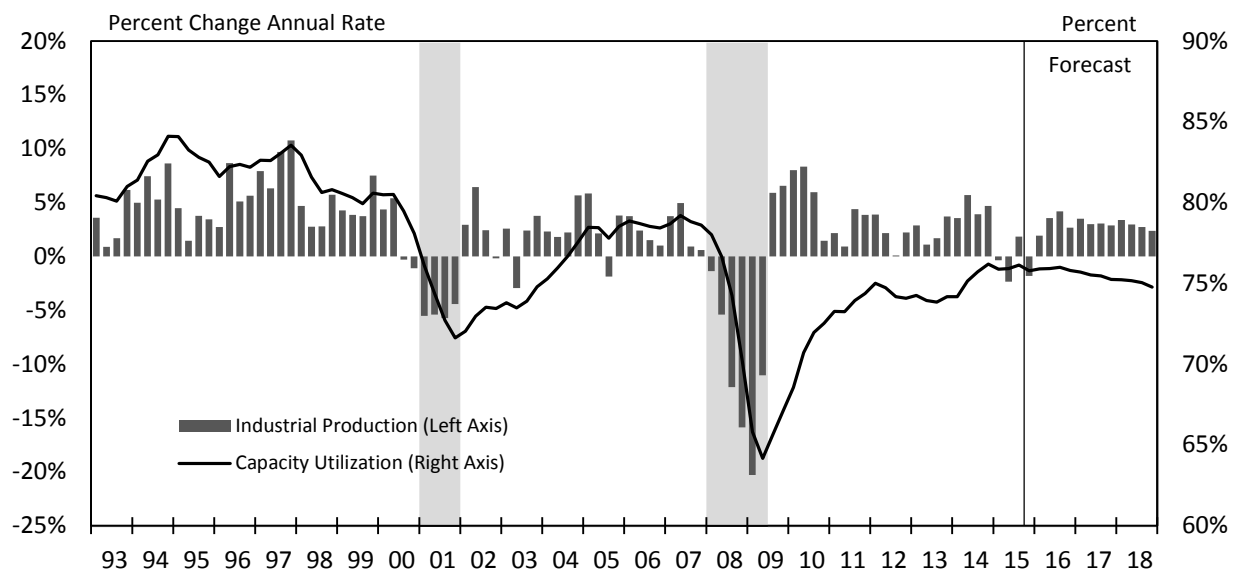
## Balance of Trade (Net Exports)



Source: Bureau of Economic Analysis, National Bureau of Economic Research, and IHS Economics

*The stronger dollar means U.S. exports are less competitive in global markets and imported goods are more affordable to domestic consumers. As a result, IHS expects net trade to remain a drag on GDP growth, through both reduced export growth and increased import gains.*

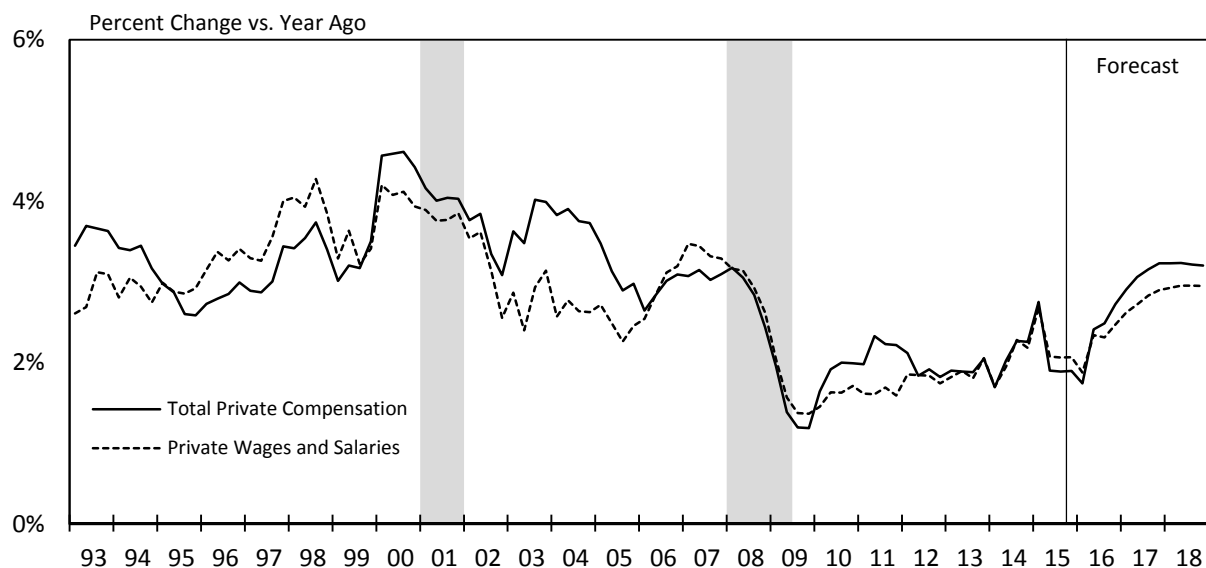
## Industrial Production and Factory Operating Rate



Source: Federal Reserve Board, National Bureau of Economic Research, and IHS Economics

*Manufacturing activity has struggled in 2015, as U.S. producers adjust to the stronger dollar, weakness abroad, lower energy prices, and business' efforts to work off a sizeable inventory glut in the second half of the year.*

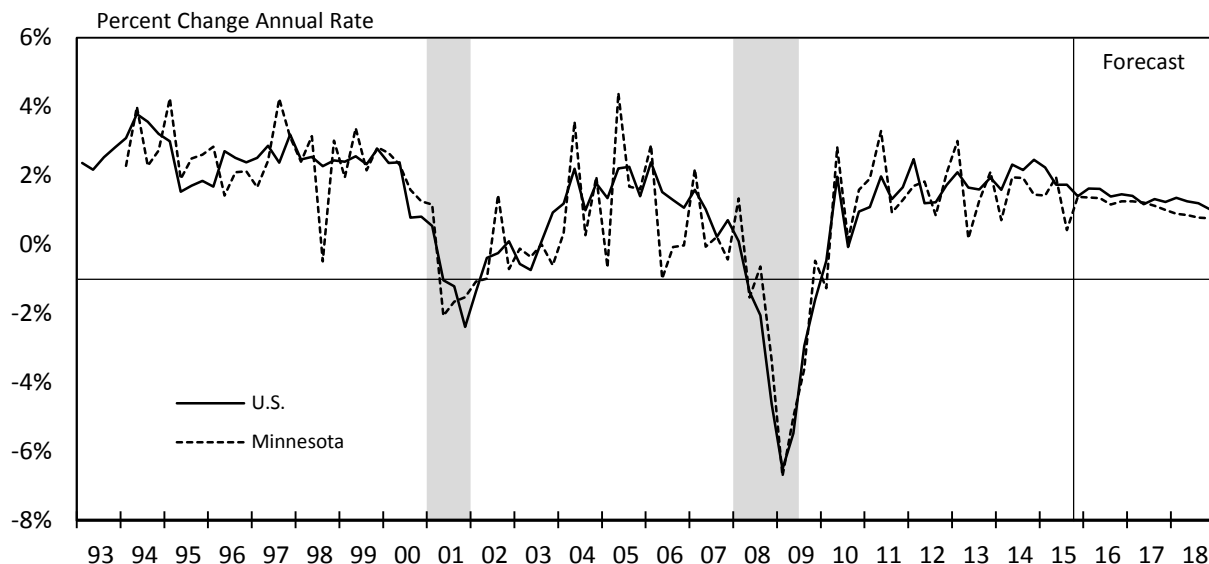
## Employment Cost Index



Source: Bureau of Labor Statistics, National Bureau of Economic Research, and IHS Economics

*Wage growth has remained modest relative to the growth in employment. The employment cost index, a broad measure of nominal wage and benefits compensation, has averaged only about 2 percent annual growth since the recession ended more than five years ago.*

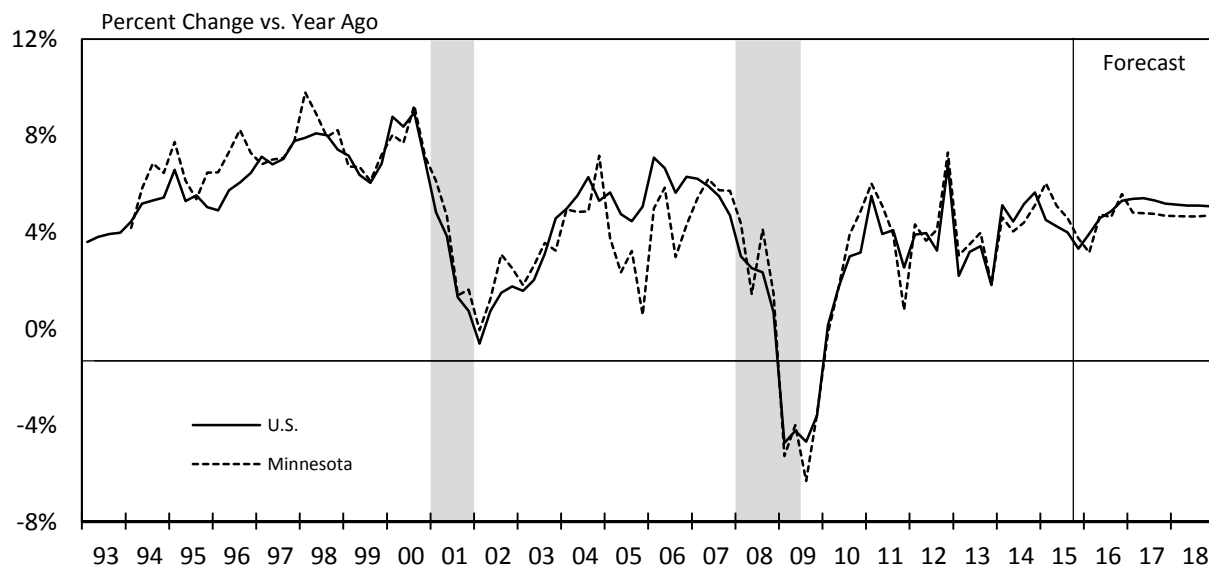
## Total Non-Farm Employment



Source: Bureau of Labor Statistics, National Bureau of Economic Research, IHS Economics, and MN Management & Budget

*The November 2015 forecast for Minnesota's economy expects job growth to remain modest. Minnesota employment is forecast to grow between 1.2 and 1.3 percent through early 2017, before faster productivity gains result in slower job growth for the remainder of the forecast horizon.*

## Wage and Salary Disbursements



Source: Bureau of Economic Analysis, National Bureau of Economic Research, IHS Economics, and MN Management & Budget

*Preliminary labor market data and income tax withholding collections suggests Minnesota's nominal wage and salary income will rise 4.9 percent in 2015, up from 4.6 percent growth in 2013. MMB forecasts Minnesota wage income to rise between 4.5 and 4.8 percent for the remainder of the forecast horizon.*

## U.S. Economic Forecast Summary

Forecast 2015 to 2019, Calendar Years

|  | 2013     | 2014     | 2015     | 2016     | 2017     | 2018     | 2019     |
|--|----------|----------|----------|----------|----------|----------|----------|
| <b>Real National Income Accounts (Billions of 2009 Dollars)</b>      |          |          |          |          |          |          |          |
| Real Gross Domestic Product (GDP)                                    | 15,583.3 | 15,961.7 | 16,348.8 | 16,816.0 | 17,292.2 | 17,753.7 | 18,208.7 |
| %Chg   | 1.5      | 2.4      | 2.4      | 2.9      | 2.8      | 2.7      | 2.6      |
| Real Consumption   | 10,590.4 | 10,875.7 | 11,220.7 | 11,574.2 | 11,929.8 | 12,268.2 | 12,606.2 |
| %Chg   | 1.7      | 2.7      | 3.2      | 3.2      | 3.1      | 2.8      | 2.8      |
| Real Nonresidential Fixed Investment                                 | 2,023.8  | 2,148.3  | 2,218.6  | 2,347.7  | 2,467.6  | 2,577.3  | 2,678.0  |
| %Chg   | 3.0      | 6.2      | 3.3      | 5.8      | 5.1      | 4.4      | 3.9      |
| Real Residential Investment  | 478.0    | 486.4    | 528.0    | 582.3    | 639.6    | 667.9    | 673.0    |
| %Chg   | 9.5      | 1.8      | 8.5      | 10.3     | 9.8      | 4.4      | 0.8      |
| Real Personal Income   | 13,077.9 | 13,467.6 | 13,993.2 | 14,444.8 | 14,901.6 | 15,381.9 | 15,848.6 |
| %Chg   | -0.3     | 3.0      | 3.9      | 3.2      | 3.2      | 3.2      | 3.0      |
| <b>Current Dollar National Income Accounts (Billions of Dollars)</b> |          |          |          |          |          |          |          |
| Gross Domestic Product (GDP)   | 16,663.2 | 17,348.1 | 17,954.7 | 18,806.4 | 19,743.3 | 20,674.9 | 21,620.4 |
| %Chg   | 3.1      | 4.1      | 3.5      | 4.7      | 5.0      | 4.7      | 4.6      |
| Personal Income  | 14,068.4 | 14,694.2 | 15,309.8 | 15,996.0 | 16,851.2 | 17,741.8 | 18,638.9 |
| %Chg   | 1.1      | 4.4      | 4.2      | 4.5      | 5.3      | 5.3      | 5.1      |
| Wage & Salary Disbursements  | 7,114.4  | 7,477.8  | 7,778.4  | 8,142.7  | 8,576.6  | 9,015.4  | 9,467.7  |
| %Chg   | 2.7      | 5.1      | 4.0      | 4.7      | 5.3      | 5.1      | 5.0      |
| Non-Wage Personal Income   | 6,954.0  | 7,216.5  | 7,531.5  | 7,853.3  | 8,274.6  | 8,726.5  | 9,171.2  |
| %Chg   | -0.4     | 3.8      | 4.4      | 4.3      | 5.4      | 5.5      | 5.1      |
| <b>Price and Wage Indexes</b>  |          |          |          |          |          |          |          |
| U.S. GDP Deflator (2005=1.0)   | 106.936  | 108.694  | 109.830  | 111.831  | 114.170  | 116.449  | 118.732  |
| %Chg   | 1.6      | 1.6      | 1.0      | 1.8      | 2.1      | 2.0      | 2.0      |
| U.S. Consumer Price Index (1982-84=1.0)                              | 2.330    | 2.367    | 2.368    | 2.401    | 2.466    | 2.526    | 2.585    |
| %Chg   | 1.5      | 1.6      | 0.0      | 1.4      | 2.7      | 2.4      | 2.4      |
| Employment Cost Index (Dec 2005=1.0)                                 | 1.188    | 1.212    | 1.238    | 1.267    | 1.306    | 1.348    | 1.392    |
| %Chg   | 1.9      | 2.1      | 2.1      | 2.3      | 3.1      | 3.2      | 3.3      |
| <b>Employment (Thousands)</b>  |          |          |          |          |          |          |          |
| Employment - Total Non-Farm Payrolls                                 | 136.4    | 139.0    | 141.9    | 144.1    | 146.1    | 147.9    | 149.5    |
| %Chg   | 1.7      | 1.9      | 2.1      | 1.6      | 1.4      | 1.3      | 1.1      |
| Construction   | 5.9      | 6.1      | 6.4      | 6.6      | 7.0      | 7.3      | 7.5      |
| %Chg   | 3.7      | 4.8      | 3.9      | 3.8      | 5.6      | 4.0      | 3.0      |
| Manufacturing  | 12.0     | 12.2     | 12.3     | 12.3     | 12.5     | 12.6     | 12.7     |
| %Chg   | 0.8      | 1.4      | 1.1      | 0.0      | 1.5      | 0.8      | 0.9      |
| Private Service-Providing  | 95.8     | 97.9     | 100.4    | 102.3    | 103.5    | 104.7    | 105.8    |
| %Chg   | 2.2      | 2.2      | 2.5      | 1.9      | 1.2      | 1.2      | 1.0      |
| Government   | 21.8     | 21.9     | 22.0     | 22.1     | 22.3     | 22.5     | 22.7     |
| %Chg   | -0.3     | 0.0      | 0.5      | 0.6      | 0.7      | 1.1      | 0.8      |
| U.S. Civilian Labor Force  | 155.4    | 155.9    | 157.3    | 159.6    | 161.9    | 163.8    | 165.3    |
| Employment - Household Survey  | 143.9    | 146.3    | 148.9    | 151.5    | 153.7    | 155.6    | 157.0    |
| Unemployment Rate (%)  | 7.4      | 6.2      | 5.3      | 5.1      | 5.0      | 4.9      | 5.0      |
| <b>Other Key Measures</b>  |          |          |          |          |          |          |          |
| Non-Farm Productivity (index, 2005=1.0)                              | 1.044    | 1.052    | 1.060    | 1.075    | 1.090    | 1.108    | 1.128    |
| %Chg   | 0.0      | 0.7      | 0.8      | 1.4      | 1.4      | 1.7      | 1.8      |
| Total Ind. Production (index, 2007=100)                              | 101.934  | 105.727  | 107.069  | 108.743  | 112.272  | 115.654  | 118.472  |
| %Chg   | 1.9      | 3.7      | 1.3      | 1.6      | 3.2      | 3.0      | 2.4      |
| <b>Manhours in Private Non-Farm Estab.</b>                           |          |          |          |          |          |          |          |
| Billions of Hours  |          |          |          |          |          |          |          |
| %Chg   | 193.0    | 197.6    | 202.0    | 206.3    | 210.3    | 213.2    | 215.8    |
| Average Weekly Hours   | 2.0      | 2.4      | 2.2      | 2.2      | 1.9      | 1.4      | 1.2      |
| Manufacturing Workweek   | 32.4     | 32.5     | 32.6     | 32.7     | 32.7     | 32.8     | 32.8     |

Source: IHS Economics (IHS); November 2015 Baseline

## Minnesota Economic Forecast Summary

Forecast 2015 to 2019 - Calendar Years

|  | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    |
|--|---------|---------|---------|---------|---------|---------|---------|
| <b>Current Dollar Income (Billions of Dollars)</b> |         |         |         |         |         |         |         |
| Personal Income                                    | 257.058 | 267.389 | 278.115 | 290.823 | 305.178 | 320.723 | 336.315 |
| %Chg   | 1.0     | 4.0     | 4.0     | 4.6     | 4.9     | 5.1     | 4.9     |
| Wage & Salary Disbursements                        | 139.574 | 145.926 | 153.019 | 159.958 | 167.580 | 175.413 | 183.918 |
| %Chg   | 3.1     | 4.6     | 4.9     | 4.5     | 4.8     | 4.7     | 4.8     |
| Non-Wage Personal Income                           | 117.485 | 121.464 | 125.095 | 130.865 | 137.598 | 145.310 | 152.395 |
| %Chg   | -1.3    | 3.4     | 3.0     | 4.6     | 5.1     | 5.6     | 4.9     |
| Supplements to Wages & Salaries                    | 30.770  | 32.457  | 34.496  | 36.959  | 39.153  | 41.209  | 43.392  |
| %Chg   | 2.3     | 5.5     | 6.3     | 7.1     | 5.9     | 5.3     | 5.3     |
| Dividends, Interest, & Rent Income                 | 45.706  | 47.508  | 49.369  | 50.773  | 53.305  | 56.838  | 59.868  |
| %Chg   | -1.2    | 3.9     | 3.9     | 2.8     | 5.0     | 6.6     | 5.3     |
| Farm Proprietors Income                            | 5.443   | 3.718   | 1.319   | 1.213   | 1.286   | 1.370   | 1.313   |
| %Chg   | 0.1     | -31.7   | -64.5   | -8.0    | 6.0     | 6.5     | -4.2    |
| Non-Farm Proprietors Income                        | 18.358  | 19.440  | 20.510  | 21.901  | 23.204  | 24.374  | 25.578  |
| %Chg   | 1.3     | 5.9     | 5.5     | 6.8     | 6.0     | 5.0     | 4.9     |
| Personal Current Transfer Receipts                 | 40.803  | 42.753  | 45.161  | 47.224  | 49.197  | 51.492  | 53.841  |
| %Chg   | 3.5     | 4.8     | 5.6     | 4.6     | 4.2     | 4.7     | 4.6     |
| Less: Contrib. for Gov. Social Ins.                | 22.383  | 23.183  | 24.382  | 25.819  | 27.160  | 28.587  | 30.207  |
| %Chg   | 17.5    | 3.6     | 5.2     | 5.9     | 5.2     | 5.3     | 5.7     |
| <b>Real Income (Billions of 2009 Dollars)</b>      |         |         |         |         |         |         |         |
| Real Personal Income                               | 238.961 | 245.067 | 254.200 | 262.620 | 269.873 | 278.060 | 285.968 |
| %Chg   | -0.3    | 2.6     | 3.7     | 3.3     | 2.8     | 3.0     | 2.8     |
| Real Wage & Salary Disbursements                   | 129.746 | 133.744 | 139.863 | 144.443 | 148.193 | 152.083 | 156.383 |
| %Chg   | 1.7     | 3.1     | 4.6     | 3.3     | 2.6     | 2.6     | 2.8     |
| <b>Employment (Thousands)</b>                      |         |         |         |         |         |         |         |
| Employment - Total Non-Farm Payrolls               | 2,775.7 | 2,815.7 | 2,857.9 | 2,893.9 | 2,929.0 | 2,956.6 | 2,979.9 |
| %Chg   | 1.7     | 1.4     | 1.5     | 1.3     | 1.2     | 0.9     | 0.8     |
| Construction                                       | 100.5   | 107.7   | 115.2   | 118.0   | 121.6   | 124.4   | 125.6   |
| %Chg   | 5.8     | 7.2     | 7.0     | 2.5     | 3.0     | 2.3     | 1.0     |
| Manufacturing                                      | 307.4   | 312.0   | 317.6   | 316.6   | 319.3   | 322.1   | 323.5   |
| %Chg   | 0.6     | 1.5     | 1.8     | -0.3    | 0.8     | 0.9     | 0.4     |
| Private Service-Providing                          | 1,946.4 | 1,970.1 | 1,997.0 | 2,030.1 | 2,055.7 | 2,072.4 | 2,089.3 |
| %Chg   | 1.9     | 1.2     | 1.4     | 1.7     | 1.3     | 0.8     | 0.8     |
| Government   | 414.5   | 418.9   | 421.5   | 423.1   | 426.6   | 431.8   | 435.8   |
| %Chg   | 0.5     | 1.1     | 0.6     | 0.4     | 0.8     | 1.2     | 0.9     |
| Minnesota Civilian Labor Force                     | 2,965.3 | 2,973.7 | 2,982.4 | 3,003.2 | 3,020.6 | 3,033.3 | 3,045.7 |
| Employment - Household Survey                      | 2,823.1 | 2,855.5 | 2,879.0 | 2,903.2 | 2,920.4 | 2,931.0 | 2,941.6 |
| Unemployment Rate (%)                              | 4.8     | 4.0     | 3.5     | 3.3     | 3.3     | 3.4     | 3.4     |
| <b>Demographic Indicators (Millions)</b>           |         |         |         |         |         |         |         |
| Total Population                                   | 5.422   | 5.457   | 5.497   | 5.536   | 5.573   | 5.610   | 5.646   |
| %Chg   | 0.8     | 0.6     | 0.7     | 0.7     | 0.7     | 0.7     | 0.6     |
| Total Population Age 16 & Over                     | 4.285   | 4.318   | 4.354   | 4.391   | 4.427   | 4.460   | 4.494   |
| %Chg   | 0.9     | 0.8     | 0.8     | 0.8     | 0.8     | 0.8     | 0.8     |
| Total Population Age 65 & Over                     | 0.756   | 0.780   | 0.808   | 0.837   | 0.868   | 0.899   | 0.930   |
| %Chg   | 3.6     | 3.2     | 3.6     | 3.6     | 3.6     | 3.5     | 3.5     |
| Total Households                                   | 2.120   | 2.129   | 2.153   | 2.176   | 2.198   | 2.220   | 2.242   |
| %Chg   | 0.4     | 0.4     | 1.1     | 1.1     | 1.0     | 1.0     | 1.0     |
| <b>Housing Indicators (Thousands)</b>              |         |         |         |         |         |         |         |
| Total Housing Permits (Authorized)                 | 16.781  | 16.768  | 21.133  | 23.644  | 24.685  | 25.012  | 25.024  |
| %Chg   | 12.0    | -0.1    | 26.0    | 11.9    | 4.4     | 1.3     | 0.0     |
| Single-Family                                      | 10.561  | 10.255  | 12.855  | 14.524  | 15.343  | 15.731  | 15.925  |
| %Chg   | 23.6    | -2.9    | 25.4    | 13.0    | 5.6     | 2.5     | 1.2     |

Source: Minnesota Management &amp; Budget (MMB) November 2015 Forecast



## Economic Forecast Comparison: Minnesota &amp; U.S.

Forecast 2015 to 2019, Calendar Years

|  | 2012     | 2013     | 2014     | 2015     | 2016     | 2017     | 2018     | 2019     |
|--|----------|----------|----------|----------|----------|----------|----------|----------|
| <b>Personal Income (Billions of Current Dollars)</b>               |          |          |          |          |          |          |          |          |
| <b>Minnesota</b>   |          |          |          |          |          |          |          |          |
| November 2015  | 254.5    | 257.1    | 267.4    | 278.1    | 290.8    | 305.2    | 320.7    | 336.3    |
| %Chg   | 5.2      | 1.0      | 4.0      | 4.0      | 4.6      | 4.9      | 5.1      | 4.9      |
| February 2015  | 254.9    | 257.5    | 266.3    | 278.7    | 292.2    | 307.5    | 322.7    | 337.5    |
| %Chg   | 5.4      | 1.0      | 3.4      | 4.7      | 4.8      | 5.2      | 4.9      | 4.6      |
| <b>U.S.</b>  |          |          |          |          |          |          |          |          |
| November 2015  | 13,915.1 | 14,068.4 | 14,694.2 | 15,309.8 | 15,996.0 | 16,851.2 | 17,741.8 | 18,638.9 |
| %Chg   | 5.0      | 1.1      | 4.4      | 4.2      | 4.5      | 5.3      | 5.3      | 5.1      |
| February 2015  | 13,887.7 | 14,166.9 | 14,716.6 | 15,313.2 | 16,061.9 | 16,973.7 | 17,847.1 | 18,745.0 |
| %Chg   | 5.2      | 2.0      | 3.9      | 4.1      | 4.9      | 5.7      | 5.1      | 5.0      |
| <b>Wage and Salary Disbursements (Billions of Current Dollars)</b> |          |          |          |          |          |          |          |          |
| <b>Minnesota</b>   |          |          |          |          |          |          |          |          |
| November 2015  | 135.4    | 139.6    | 145.9    | 153.0    | 160.0    | 167.6    | 175.4    | 183.9    |
| %Chg   | 4.9      | 3.1      | 4.6      | 4.9      | 4.5      | 4.8      | 4.7      | 4.8      |
| February 2015  | 135.6    | 139.7    | 145.7    | 153.7    | 161.1    | 169.0    | 176.8    | 184.9    |
| %Chg   | 5.0      | 3.1      | 4.3      | 5.4      | 4.8      | 4.9      | 4.6      | 4.6      |
| <b>U.S.</b>  |          |          |          |          |          |          |          |          |
| November 2015  | 6,930.3  | 7,114.4  | 7,477.8  | 7,778.4  | 8,142.7  | 8,576.6  | 9,015.4  | 9,467.7  |
| %Chg   | 4.5      | 2.7      | 5.1      | 4.0      | 4.7      | 5.3      | 5.1      | 5.0      |
| February 2015  | 6,932.1  | 7,124.7  | 7,432.4  | 7,769.5  | 8,174.6  | 8,604.6  | 9,040.0  | 9,501.8  |
| %Chg   | 4.5      | 2.8      | 4.3      | 4.5      | 5.2      | 5.3      | 5.1      | 5.1      |
| <b>Total Non-Farm Payroll Employment (Thousands)</b>               |          |          |          |          |          |          |          |          |
| <b>Minnesota</b>   |          |          |          |          |          |          |          |          |
| November 2015  | 2,729.7  | 2,775.7  | 2,815.7  | 2,857.9  | 2,893.9  | 2,929.0  | 2,956.6  | 2,979.9  |
| %Chg   | 1.6      | 1.7      | 1.4      | 1.5      | 1.3      | 1.2      | 0.9      | 0.8      |
| February 2015  | 2,730.7  | 2,778.1  | 2,816.6  | 2,862.9  | 2,915.0  | 2,955.1  | 2,982.0  | 3,009.9  |
| %Chg   | 1.6      | 1.7      | 1.4      | 1.6      | 1.8      | 1.4      | 0.9      | 0.9      |
| <b>U.S.</b>  |          |          |          |          |          |          |          |          |
| November 2015  | 134,098  | 136,394  | 139,023  | 141,898  | 144,120  | 146,092  | 147,939  | 149,545  |
| %Chg   | 1.7      | 1.7      | 1.9      | 2.1      | 1.6      | 1.4      | 1.3      | 1.1      |
| February 2015  | 134,098  | 136,394  | 139,023  | 142,098  | 144,771  | 146,843  | 148,197  | 149,612  |
| %Chg   | 1.7      | 1.7      | 1.9      | 2.2      | 1.9      | 1.4      | 0.9      | 1.0      |
| <b>Average Annual Non-Farm Wage (Current Dollars)</b>              |          |          |          |          |          |          |          |          |
| <b>Minnesota</b>   |          |          |          |          |          |          |          |          |
| November 2015  | 49,598   | 50,284   | 51,825   | 53,542   | 55,275   | 57,214   | 59,330   | 61,720   |
| %Chg   | 3.2      | 1.4      | 3.1      | 3.3      | 3.2      | 3.5      | 3.7      | 4.0      |
| February 2015  | 49,641   | 50,293   | 51,740   | 53,672   | 55,265   | 57,173   | 59,277   | 61,434   |
| %Chg   | 3.4      | 1.3      | 2.9      | 3.7      | 3.0      | 3.5      | 3.7      | 3.6      |
| <b>U.S.</b>  |          |          |          |          |          |          |          |          |
| November 2015  | 51,680   | 52,161   | 53,788   | 54,817   | 56,499   | 58,707   | 60,940   | 63,310   |
| %Chg   | 2.7      | 0.9      | 3.1      | 1.9      | 3.1      | 3.9      | 3.8      | 3.9      |
| February 2015  | 51,694   | 52,236   | 53,461   | 54,677   | 56,465   | 58,598   | 61,000   | 63,509   |
| %Chg   | 2.7      | 1.0      | 2.3      | 2.3      | 3.3      | 3.8      | 4.1      | 4.1      |

Source: IHS Economics (IHS) and Minnesota Management and Budget (MMB)

## Alternative U.S. Economic Forecast Comparison

Calendar Years

|  | 15Q1 | 15Q2 | 15Q3 | 15Q4 | 16Q1 | 16Q2 | 2014 | 2015 | 2016 | 2017 |
|--|------|------|------|------|------|------|------|------|------|------|
| <b>Real Gross Domestic Product (GDP), Percent Change, Seasonally Adjusted at Annual Rate</b>               |      |      |      |      |      |      |      |      |      |      |
| IHS Economics Baseline (11-15)   | 0.6  | 3.9  | 1.5  | 2.4  | 3.4  | 3.0  | 2.4  | 2.4  | 2.9  | 2.8  |
| Blue Chip Consensus (11-15)  | 0.6  | 3.9  | 1.5  | 2.7  | 2.6  | 2.7  | 2.4  | 2.4  | 2.6  | 2.4  |
| Moody's Analytics (11-15)  | 0.6  | 3.9  | 1.5  | 2.9  | 3.4  | 3.2  | 2.4  | 2.5  | 3.0  | 3.0  |
| Wells Fargo (11-15)  | 0.6  | 3.9  | 1.5  | 2.6  | 2.5  | 2.6  | 2.4  | 2.4  | 2.5  | 2.4  |
| UBS (11-15)  |      |      | N/A  |      |      |      | 2.4  | 2.5  | 2.8  | 2.5  |
| Standard & Poors (09-15)   | 0.6  | 3.7  | 2.4  | 2.9  | 2.4  | 2.8  | 2.4  | 2.5  | 2.8  | 2.7  |
| Congressional Budget Office (8-15)   |      |      | N/A  |      |      |      | 2.4  | 2.3  | 3.0  | 2.9  |
| <b>Consumer Price Index (CPI), Percent Change, Seasonally Adjusted at Annual Rate (except where noted)</b> |      |      |      |      |      |      |      |      |      |      |
| IHS Economics Baseline (11-15)   | -3.1 | 3.0  | 1.6  | -0.9 | 0.3  | 2.3  | 1.6  | 0.0  | 1.4  | 2.7  |
| Blue Chip Consensus (11-15)  | -3.1 | 3.0  | 1.6  | 0.7  | 1.8  | 2.3  | 1.6  | 0.2  | 1.8  | 2.3  |
| Moody's Analytics (11-15)  | -3.1 | 3.0  | 1.6  | 1.1  | 2.0  | 2.5  | 1.6  | 0.2  | 2.0  | 2.8  |
| Wells Fargo (11-15)*   | -0.1 | 0.0  | 0.1  | 0.5  | 1.7  | 1.5  | 1.6  | 0.1  | 1.8  | 2.2  |
| UBS (11-15)  |      |      | N/A  |      |      |      | 1.6  | 0.2  | 1.6  | 2.6  |
| Standard & Poors (09-15)*  | -0.1 | 0.0  | -0.2 | 0.5  | 2.0  | 2.0  | 1.6  | 0.1  | 2.2  | 2.3  |
| Congressional Budget Office (8-15)   |      |      | N/A  |      |      |      | 1.6  | 0.1  | 2.1  | 2.3  |

\* Year-over-Year Percent Change

## IHS Economics Baseline Comparison: U.S. Economic Forecast

Calendar Years

|   | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|---|------|------|------|------|------|------|------|------|
| <b>Real Gross Domestic Product (GDP), Annual Percent Change</b> |      |      |      |      |      |      |      |      |
| February 2011   | 2.9  | 3.1  | 3.3  | 2.9  | -    | -    | -    | -    |
| November 2011   | 1.6  | 2.5  | 3.5  | 3.3  | -    | -    | -    | -    |
| February 2012   | 2.1  | 2.3  | 3.3  | 3.2  | -    | -    | -    | -    |
| November 2012   | 2.1  | 1.9  | 2.8  | 3.3  | 2.9  | 2.1  | -    | -    |
| February 2013   | 2.2  | 1.9  | 2.8  | 3.3  | 2.9  | 2.8  | -    | -    |
| November 2013   | 2.8  | 1.7  | 2.5  | 3.1  | 3.3  | 3.1  | -    | -    |
| February 2014   | 2.8  | 1.9  | 2.7  | 3.3  | 3.4  | 3.1  | -    | -    |
| November 2014   | 2.3  | 2.2  | 2.2  | 2.6  | 2.8  | 3.0  | 2.6  | 2.6  |
| February 2015   | 2.3  | 2.2  | 2.4  | 3.0  | 2.7  | 2.8  | 2.6  | 2.8  |
| November 2015   | 2.2  | 1.5  | 2.4  | 2.4  | 2.9  | 2.8  | 2.7  | 2.6  |
| <b>Consumer Price Index (CPI), Annual Percent Change</b>        |      |      |      |      |      |      |      |      |
| February 2011   | 1.7  | 1.9  | 2.2  | 2.2  | -    | -    | -    | -    |
| November 2011   | 1.5  | 1.7  | 2.0  | 2.1  | -    | -    | -    | -    |
| February 2012   | 2.0  | 1.8  | 1.9  | 1.9  | -    | -    | -    | -    |
| November 2012   | 2.1  | 1.3  | 1.8  | 1.7  | 1.9  | 1.9  | -    | -    |
| February 2013   | 2.1  | 1.4  | 1.7  | 1.6  | 1.7  | 1.8  | -    | -    |
| November 2013   | 2.1  | 1.4  | 1.4  | 1.7  | 1.9  | 1.9  | -    | -    |
| February 2014   | 2.1  | 1.5  | 1.3  | 1.7  | 1.8  | 1.8  | -    | -    |
| November 2014   | 2.1  | 1.5  | 1.7  | 1.0  | 1.6  | 2.2  | 2.2  | 2.3  |
| February 2015   | 2.1  | 1.5  | 1.6  | -0.7 | 2.3  | 2.7  | 2.7  | 2.5  |
| November 2015   | 2.1  | 1.5  | 1.6  | 0.0  | 1.4  | 2.7  | 2.4  | 2.4  |

Source: IHS Economics (IHS)

**Economic Factors Affecting Tax Revenue**

Billions of Current Dollars

|   | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    |
|---|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Individual Income Tax (Calendar Years)</b>             |         |         |         |         |         |         |         |         |
| <b>Minnesota Non-Farm Tax Base</b>                        |         |         |         |         |         |         |         |         |
| February 2013   | 193.802 | 198.765 | 210.048 | 220.613 | 231.408 | 242.315 | -       | -       |
| %Chg  | 5.1     | 2.6     | 5.7     | 5.0     | 4.9     | 4.7     |         |         |
| November 2013   | 196.327 | 204.957 | 214.980 | 225.805 | 237.873 | 250.970 | -       | -       |
| %Chg  | 5.3     | 4.4     | 4.9     | 5.0     | 5.3     | 5.5     |         |         |
| February 2014   | 196.327 | 203.603 | 213.810 | 225.420 | 238.065 | 251.045 | -       | -       |
| %Chg  | 5.3     | 3.7     | 5.0     | 5.4     | 5.6     | 5.5     |         |         |
| November 2014   | 199.980 | 206.101 | 213.919 | 222.743 | 234.048 | 247.250 | 259.688 | 271.678 |
| %Chg  | 6.9     | 3.1     | 3.8     | 4.1     | 5.1     | 5.6     | 5.0     | 4.6     |
| February 2015   | 199.980 | 206.101 | 214.375 | 224.873 | 236.323 | 249.318 | 261.988 | 274.210 |
| %Chg  | 6.9     | 3.1     | 4.0     | 4.9     | 5.1     | 5.5     | 5.1     | 4.7     |
| November 2015   | 199.755 | 203.638 | 212.873 | 222.897 | 232.633 | 244.093 | 256.625 | 269.365 |
| %Chg  | 7.0     | 1.9     | 4.5     | 4.7     | 4.4     | 4.9     | 5.1     | 5.0     |
| <b>Minnesota Wage and Salary Disbursements</b>            |         |         |         |         |         |         |         |         |
| February 2013   | 136.166 | 139.090 | 146.780 | 153.973 | 161.200 | 168.063 | -       | -       |
| %Chg  | 5.0     | 2.1     | 5.5     | 4.9     | 4.7     | 4.3     |         |         |
| November 2013   | 135.435 | 141.108 | 147.160 | 154.325 | 161.890 | 169.563 | -       | -       |
| %Chg  | 4.8     | 4.2     | 4.3     | 4.9     | 4.9     | 4.7     |         |         |
| February 2014   | 135.435 | 140.128 | 147.110 | 154.948 | 162.930 | 170.663 | -       | -       |
| %Chg  | 4.8     | 3.5     | 5.0     | 5.3     | 5.2     | 4.7     |         |         |
| November 2014   | 135.558 | 139.720 | 145.147 | 151.563 | 158.495 | 165.898 | 173.420 | 181.153 |
| %Chg  | 5.0     | 3.1     | 3.9     | 4.4     | 4.6     | 4.7     | 4.5     | 4.5     |
| February 2015   | 135.558 | 139.720 | 145.733 | 153.655 | 161.100 | 168.953 | 176.765 | 184.913 |
| %Chg  | 5.0     | 3.1     | 4.3     | 5.4     | 4.8     | 4.9     | 4.6     | 4.6     |
| November 2015   | 135.389 | 139.574 | 145.926 | 153.019 | 159.958 | 167.580 | 175.413 | 183.918 |
| %Chg  | 4.9     | 3.1     | 4.6     | 4.9     | 4.5     | 4.8     | 4.7     | 4.8     |
| <b>Minnesota Dividends, Interest, &amp; Rental Income</b> |         |         |         |         |         |         |         |         |
| February 2013   | 41.010  | 42.685  | 44.949  | 47.103  | 49.620  | 52.949  | -       | -       |
| %Chg  | 5.3     | 4.1     | 5.3     | 4.8     | 5.3     | 6.7     |         |         |
| November 2013   | 43.487  | 45.385  | 48.313  | 50.864  | 54.301  | 58.723  | -       | -       |
| %Chg  | 6.0     | 4.4     | 6.5     | 5.3     | 6.8     | 8.1     |         |         |
| February 2014   | 43.487  | 45.086  | 47.300  | 49.877  | 53.438  | 57.725  | -       | -       |
| %Chg  | 6.0     | 3.7     | 4.9     | 5.4     | 7.1     | 8.0     |         |         |
| November 2014   | 46.062  | 47.043  | 48.489  | 49.808  | 53.303  | 58.403  | 62.585  | 65.879  |
| %Chg  | 10.4    | 2.1     | 3.1     | 2.7     | 7.0     | 9.6     | 7.2     | 5.3     |
| February 2015   | 46.062  | 47.043  | 48.454  | 49.863  | 52.930  | 57.410  | 61.539  | 64.549  |
| %Chg  | 10.4    | 2.1     | 3.0     | 2.9     | 6.2     | 8.5     | 7.2     | 4.9     |
| November 2015   | 46.238  | 45.706  | 47.508  | 49.369  | 50.773  | 53.305  | 56.838  | 59.868  |
| %Chg  | 11.6    | -1.2    | 3.9     | 3.9     | 2.8     | 5.0     | 6.6     | 5.3     |
| <b>Minnesota Non-Farm Proprietors' Income</b>             |         |         |         |         |         |         |         |         |
| February 2013   | 16.625  | 16.989  | 18.320  | 19.540  | 20.587  | 21.300  | -       | -       |
| %Chg  | 5.2     | 2.2     | 7.8     | 6.7     | 5.4     | 3.5     |         |         |
| November 2013   | 17.405  | 18.465  | 19.508  | 20.619  | 21.681  | 22.684  | -       | -       |
| %Chg  | 6.8     | 6.1     | 5.6     | 5.7     | 5.1     | 4.6     |         |         |
| February 2014   | 17.405  | 18.390  | 19.403  | 20.595  | 21.700  | 22.656  | -       | -       |
| %Chg  | 6.8     | 5.7     | 5.5     | 6.1     | 5.4     | 4.4     |         |         |
| November 2014   | 18.360  | 19.338  | 20.282  | 21.372  | 22.248  | 22.948  | 23.683  | 24.644  |
| %Chg  | 13.2    | 5.3     | 4.9     | 5.4     | 4.1     | 3.1     | 3.2     | 4.1     |
| February 2015   | 18.360  | 19.338  | 20.188  | 21.356  | 22.291  | 22.957  | 23.681  | 24.747  |
| %Chg  | 13.2    | 5.3     | 4.4     | 5.8     | 4.4     | 3.0     | 3.2     | 4.5     |
| November 2015   | 18.128  | 18.358  | 19.440  | 20.510  | 21.901  | 23.204  | 24.374  | 25.578  |
| %Chg  | 11.8    | 1.3     | 5.9     | 5.5     | 6.8     | 6.0     | 5.0     | 4.9     |

**Economic Factors Affecting Tax Revenue (Continued)**

Billions of Current Dollars

|  | 2012   | 2013   | 2014   | 2015   | 2016   | 2017   | 2018   | 2019    |
|--|--------|--------|--------|--------|--------|--------|--------|---------|
| <b>General Sales Tax (Fiscal Year)</b>   |        |        |        |        |        |        |        |         |
| <b>Minnesota Synthetic Sales Tax Base (Fiscal Year)</b>                            |        |        |        |        |        |        |        |         |
| February 2013  | 72.610 | 75.610 | 78.247 | 81.180 | 83.936 | 86.428 | -      | -       |
| %Chg   | 5.1    | 4.1    | 3.5    | 3.7    | 3.4    | 3.0    |        |         |
| November 2013  | 71.869 | 74.932 | 77.285 | 81.086 | 84.764 | 88.492 | -      | -       |
| %Chg   | 5.2    | 4.3    | 3.1    | 4.9    | 4.5    | 4.4    |        |         |
| February 2014  | 73.764 | 77.085 | 80.121 | 84.742 | 89.234 | 93.625 | -      | -       |
| %Chg   | 5.3    | 4.5    | 3.9    | 5.8    | 5.3    | 4.9    |        |         |
| November 2014  | 73.746 | 76.929 | 80.113 | 83.634 | 87.403 | 91.537 | 95.285 | 98.523  |
| %Chg   | 5.1    | 4.3    | 4.1    | 4.4    | 4.5    | 4.7    | 4.1    | 3.4     |
| February 2015  | 73.771 | 76.948 | 80.213 | 83.568 | 88.120 | 92.585 | 96.380 | 100.037 |
| %Chg   | 5.1    | 4.3    | 4.2    | 4.2    | 5.4    | 5.1    | 4.1    | 3.8     |
| November 2015*   | 73.662 | 76.441 | 78.560 | 81.685 | 85.626 | 90.097 | 94.537 | 98.470  |
| %Chg   | 5.3    | 3.8    | 2.8    | 4.0    | 4.8    | 5.2    | 4.9    | 4.2     |
| <b>Minnesota's Proxy Share of U.S. Consumer Durable Spending (Excluding Autos)</b> |        |        |        |        |        |        |        |         |
| February 2013  | 14.005 | 14.649 | 15.087 | 15.547 | 16.044 | 16.424 | -      | -       |
| %Chg   | 5.2    | 4.6    | 3.0    | 3.0    | 3.2    | 2.4    |        |         |
| November 2013  | 13.866 | 14.519 | 15.253 | 15.862 | 16.467 | 17.091 | -      | -       |
| %Chg   | 5.4    | 4.7    | 5.1    | 4.0    | 3.8    | 3.8    |        |         |
| February 2014  | 13.866 | 14.507 | 15.141 | 15.746 | 16.512 | 17.212 | -      | -       |
| %Chg   | 5.4    | 4.6    | 4.4    | 4.0    | 4.9    | 4.2    |        |         |
| November 2014  | 13.820 | 14.400 | 14.844 | 15.336 | 15.920 | 16.601 | 17.316 | 17.943  |
| %Chg   | 5.2    | 4.2    | 3.1    | 3.3    | 3.8    | 4.3    | 4.3    | 3.6     |
| February 2015  | 13.820 | 14.400 | 14.851 | 15.403 | 16.139 | 16.759 | 17.363 | 17.964  |
| %Chg   | 5.2    | 4.2    | 3.1    | 3.7    | 4.8    | 3.8    | 3.6    | 3.5     |
| November 2015  | 13.808 | 14.299 | 14.605 | 15.163 | 15.803 | 16.555 | 17.184 | 17.870  |
| %Chg   | 5.2    | 3.6    | 2.1    | 3.8    | 4.2    | 4.8    | 3.8    | 4.0     |
| <b>Minnesota's Proxy Share of U.S. Capital Equipment Spending</b>                  |        |        |        |        |        |        |        |         |
| February 2013  | 12.271 | 13.306 | 14.182 | 15.272 | 16.522 | 17.549 | -      | -       |
| %Chg   | 8.9    | 8.4    | 6.6    | 7.7    | 8.2    | 6.2    |        |         |
| November 2013  | 12.827 | 13.602 | 14.293 | 15.653 | 17.022 | 18.358 | -      | -       |
| %Chg   | 7.8    | 6.0    | 5.1    | 9.5    | 8.7    | 7.8    |        |         |
| February 2014  | 12.827 | 13.580 | 14.119 | 15.649 | 17.368 | 18.748 | -      | -       |
| %Chg   | 7.8    | 5.9    | 4.0    | 10.8   | 11.0   | 7.9    |        |         |
| November 2014  | 12.820 | 13.487 | 14.079 | 15.116 | 16.412 | 17.910 | 19.108 | 20.061  |
| %Chg   | 7.8    | 5.2    | 4.4    | 7.4    | 8.6    | 9.1    | 6.7    | 5.0     |
| February 2015  | 12.820 | 13.487 | 14.087 | 15.280 | 16.932 | 18.491 | 19.807 | 20.946  |
| %Chg   | 7.8    | 5.2    | 4.4    | 8.5    | 10.8   | 9.2    | 7.1    | 5.8     |
| November 2015  | 13.005 | 13.547 | 13.835 | 14.697 | 15.382 | 16.677 | 18.007 | 19.165  |
| %Chg   | 9.3    | 4.2    | 2.1    | 6.2    | 4.7    | 8.4    | 8.0    | 6.4     |
| <b>Minnesota's Proxy Share of U.S. Construction Spending</b>                       |        |        |        |        |        |        |        |         |
| February 2013  | 5.257  | 5.656  | 6.171  | 6.870  | -      | -      | -      | -       |
| %Chg   | 11.0   | 7.6    | 9.1    | 11.3   |        |        |        |         |
| November 2013  | 5.441  | 5.944  | 6.693  | 7.396  | 8.196  | 8.869  | -      | -       |
| %Chg   | 11.6   | 9.2    | 12.6   | 10.5   | 10.8   | 8.2    |        |         |
| February 2014  | 5.439  | 5.965  | 6.684  | 7.483  | 8.173  | 8.819  | -      | -       |
| %Chg   | 11.5   | 9.7    | 12.1   | 12.0   | 9.2    | 7.9    |        |         |
| November 2014  | 5.514  | 5.930  | 6.721  | 7.363  | 7.899  | 8.319  | 8.713  | 9.026   |
| %Chg   | 12.7   | 7.5    | 13.3   | 9.6    | 7.3    | 5.3    | 4.7    | 3.6     |
| February 2015  | 5.513  | 5.925  | 6.653  | 7.122  | 7.468  | 8.023  | 8.486  | 8.861   |
| %Chg   | 12.7   | 7.5    | 12.3   | 7.0    | 4.9    | 7.4    | 5.8    | 4.4     |
| November 2015  | 5.522  | 5.902  | 6.598  | 7.187  | 7.675  | 8.214  | 8.764  | 9.142   |
| %Chg   | 12.9   | 6.9    | 11.8   | 8.9    | 6.8    | 7.0    | 6.7    | 4.3     |

**Economic Factors Affecting Tax Revenue (Continued)**

Billions of Current Dollars

|  | 2012    | 2013    | 2014    | 2015    | 2016    | 2017    | 2018    | 2019    |
|--|---------|---------|---------|---------|---------|---------|---------|---------|
| <b>Corporate Franchise Tax (Calendar Year)</b>   |         |         |         |         |         |         |         |         |
| <b>U.S. Corporate Profits (w/ IVA and capital consumption adjustment, less profits from Federal Reserve)</b> |         |         |         |         |         |         |         |         |
| February 2013  | 1,449.4 | 1,372.8 | 1,411.1 | 1,445.5 | 1,452.9 | 1,469.8 | -       | -       |
| %Chg   | 5.4     | -5.3    | 2.8     | 2.4     | 0.5     | 1.2     |         |         |
| November 2013**  | 1,947.8 | 2,012.2 | 2,097.9 | 2,209.0 | 2,311.5 | 2,371.8 | -       | -       |
| %Chg   | 4.8     | 3.3     | 4.3     | 5.3     | 4.6     | 2.6     |         |         |
| February 2014  | 1,947.8 | 2,027.7 | 2,167.7 | 2,270.4 | 2,352.2 | 2,412.5 | -       | -       |
| %Chg   | 4.8     | 4.1     | 6.9     | 4.7     | 3.6     | 2.6     |         |         |
| November 2014  | 1,960.6 | 2,024.0 | 1,994.3 | 2,183.5 | 2,282.4 | 2,295.8 | 2,331.1 | 2,427.9 |
| %Chg   | 8.4     | 3.2     | -1.5    | 9.5     | 4.5     | 0.6     | 1.5     | 4.2     |
| February 2015  | 1,960.6 | 2,024.0 | 2,116.7 | 2,209.6 | 2,303.6 | 2,259.0 | 2,276.9 | 2,383.0 |
| %Chg   | 8.4     | 3.2     | 4.6     | 4.4     | 4.3     | -1.9    | 0.8     | 4.7     |
| November 2015  | 1,940.7 | 1,954.6 | 1,972.5 | 1,918.5 | 1,993.1 | 2,045.1 | 2,062.6 | 2,099.7 |
| %Chg   | 7.3     | 0.7     | 0.9     | -2.7    | 3.9     | 2.6     | 0.9     | 1.8     |
| <b>Insurance Gross Premiums Tax (Calendar Year)</b>  |         |         |         |         |         |         |         |         |
| <b>Minnesota Direct Premiums Written: Property and Life (Index: 2003=100.0)</b>                              |         |         |         |         |         |         |         |         |
| February 2013  | -       | -       | -       | -       | -       | -       | -       | -       |
| %Chg   |         |         |         |         |         |         |         |         |
| November 2013  | -       | -       | -       | -       | -       | -       | -       | -       |
| %Chg   |         |         |         |         |         |         |         |         |
| February 2014  | -       | -       | -       | -       | -       | -       | -       | -       |
| %Chg   |         |         |         |         |         |         |         |         |
| November 2014***   | 121.521 | 124.190 | 129.157 | 131.687 | 133.996 | 135.511 | 136.147 | 136.934 |
| %Chg   | 5.0     | 2.2     | 4.0     | 2.0     | 1.8     | 1.1     | 0.5     | 0.6     |
| February 2015  | 121.521 | 124.190 | 129.033 | 134.232 | 137.048 | 138.884 | 140.414 | 142.209 |
| %Chg   | 5.0     | 2.2     | 3.9     | 4.0     | 2.1     | 1.3     | 1.1     | 1.3     |
| November 2015  | 121.521 | 124.190 | 126.037 | 129.424 | 132.180 | 136.152 | 139.059 | 142.272 |
| %Chg   | 5.0     | 2.2     | 1.5     | 2.7     | 2.1     | 3.0     | 2.1     | 2.3     |
| <b>Deed &amp; Mortgage Tax (Fiscal Year)</b>   |         |         |         |         |         |         |         |         |
| <b>U.S. New and Existing Home Sales (Current \$ Value)</b>   |         |         |         |         |         |         |         |         |
| February 2013  | 939.3   | 1,088.2 | 1,234.0 | 1,446.5 | 1,527.7 | 1,523.8 | -       | -       |
| %Chg   | 9.7     | 15.9    | 13.4    | 17.2    | 5.6     | -0.3    |         |         |
| November 2013  | 937.7   | 1,140.5 | 1,334.6 | 1,509.4 | 1,574.1 | 1,548.1 | -       | -       |
| %Chg   | 9.7     | 21.6    | 17.0    | 13.1    | 4.3     | -1.7    |         |         |
| February 2014  | 937.7   | 1,140.6 | 1,273.5 | 1,472.5 | 1,574.3 | 1,559.7 | -       | -       |
| %Chg   | 9.7     | 21.6    | 11.7    | 15.6    | 6.9     | -0.9    |         |         |
| November 2014  | 937.7   | 1,140.9 | 1,221.3 | 1,339.7 | 1,455.0 | 1,517.0 | 1,525.4 | 1,600.0 |
| %Chg   | 9.5     | 21.7    | 7.0     | 9.7     | 8.6     | 4.3     | 0.6     | 4.9     |
| February 2015  | 937.7   | 1,140.9 | 1,221.3 | 1,362.5 | 1,547.8 | 1,642.4 | 1,701.4 | 1,807.2 |
| %Chg   | 9.5     | 21.7    | 7.0     | 11.6    | 13.6    | 6.1     | 3.6     | 6.2     |
| November 2015  | 940.3   | 1,142.4 | 1,221.3 | 1,341.3 | 1,481.1 | 1,634.6 | 1,748.7 | 1,796.7 |
| %Chg   | 9.8     | 21.5    | 6.9     | 9.8     | 10.4    | 10.4    | 7.0     | 2.7     |

\* Series revised in part due to law changes.

\*\* Beginning November 2013 includes rest-of-world profits to account for change in the Minnesota tax base.

\*\*\* Beginning November 2014 primary factor became Minnesota Direct Premiums Written: Property and Life.

**Current Fiscal Year-to-Date 2016**  
**End-of-Session vs. Actual Revenue Comparison**

Fiscal Year-to-Date 2016 (July, 2015 to October, 2015)

| (\$ in Thousands)                  | February 2015<br>FYTD 2016 | Actual<br>FYTD 2016 | \$ Difference<br>Act-Fcst |
|------------------------------------|----------------------------|---------------------|---------------------------|
| <b>Individual Income Tax</b>       |                            |                     |                           |
| Withholding                        | 2,456,800                  | 2,494,943           | 38,143                    |
| Declarations                       | 458,315                    | 475,844             | 17,529                    |
| Miscellaneous                      | 201,739                    | 210,334             | 8,596                     |
| Gross                              | 3,116,854                  | 3,181,122           | 64,268                    |
| Refunds                            | 63,006                     | 66,590              | 3,584                     |
| <b>Net</b>                         | 3,053,847                  | 3,114,532           | 60,685                    |
| <b>Corporate &amp; Bank Excise</b> |                            |                     |                           |
| Declarations                       | 390,041                    | 357,737             | (32,303)                  |
| Miscellaneous                      | 109,890                    | 147,667             | 37,777                    |
| Gross                              | 499,931                    | 505,404             | 5,474                     |
| Refunds                            | 30,987                     | 23,771              | (7,216)                   |
| <b>Net</b>                         | 468,943                    | 481,634             | 12,690                    |
| <b>Sales Tax</b>                   |                            |                     |                           |
| Gross                              | 1,710,004                  | 1,753,978           | 43,974                    |
| Refunds (including Indian Refunds) | 50,363                     | 59,221              | 8,858                     |
| <b>Net</b>                         | 1,659,641                  | 1,694,757           | 35,115                    |
| <b>Other Revenues:</b>             |                            |                     |                           |
| Estate                             | 50,832                     | 67,339              | 16,507                    |
| Liquor/Wine/Beer                   | 23,084                     | 25,378              | 2,294                     |
| Cigarette/Tobacco/Cont Sub         | 152,946                    | 163,445             | 10,499                    |
| Deed and Mortgage                  | 61,781                     | 70,133              | 8,353                     |
| Insurance Gross Earnings           | 90,064                     | 86,013              | (4,051)                   |
| Lawful Gambling                    | 15,932                     | 13,174              | (2,758)                   |
| Health Care Surcharge              | 43,980                     | 37,812              | (6,168)                   |
| Other Taxes                        | 238                        | 413                 | 175                       |
| Statewide Property Tax             | 191,519                    | 194,432             | 2,913                     |
| DHS SOS Collections                | 17,852                     | 14,673              | (3,179)                   |
| Investment Income                  | 3,333                      | 4,727               | 1,394                     |
| Tobacco Settlement                 | 100                        | 100                 | -                         |
| Departmental Earnings              | 54,635                     | 52,347              | (2,288)                   |
| Fines and Surcharges               | 21,251                     | 20,687              | (564)                     |
| Lottery Revenues                   | 12,738                     | 12,555              | (182)                     |
| Revenues yet to be allocated       | 0                          | 1,297               | 1,297                     |
| Residual Revenues                  | 28,772                     | 36,932              | 8,160                     |
| County Nursing Home, Pub Hosp IGT  | 2,264                      | 1,698               | (566)                     |
| Other Subtotal                     | 771,321                    | 803,156             | 31,834                    |
| Other Refunds                      | 847                        | 1,173               | 326                       |
| <b>Other Net</b>                   | 770,474                    | 801,983             | 31,509                    |
| <b>Total Gross</b>                 | <b>6,098,110</b>           | <b>6,243,660</b>    | <b>145,550</b>            |
| <b>Total Refunds</b>               | <b>145,204</b>             | <b>150,755</b>      | <b>5,551</b>              |
| <b>Total Net</b>                   | <b>5,952,906</b>           | <b>6,092,905</b>    | <b>139,999</b>            |

**Closed Biennium: FY 2014-15 General Fund Budget**  
**End-of-Session vs. Actual Comparison**  
(\$ in thousands)

|  | 5-15 Enacted<br>FY 2014-2015 | 11-15 Fcst<br>FY 2014-2015 | \$<br>Change     |
|--|------------------------------|----------------------------|------------------|
| <b><u>Actual &amp; Estimated Resources</u></b> |                              |                            |                  |
| Balance Forward From Prior Year                | 1,711,915                    | 1,711,915                  | 0                |
| Current Resources:                             |                              |                            |                  |
| Tax Revenues                                   | 37,624,866                   | 38,140,503                 | 515,637          |
| Non-Tax Revenues                               | 1,458,525                    | 1,473,937                  | 15,412           |
| Subtotal - Non-Dedicated Revenue               | 39,083,391                   | 39,614,439                 | 531,048          |
| Dedicated Revenue                              | 1,005                        | 1,291                      | 286              |
| Transfers In                                   | 255,333                      | 270,354                    | 15,021           |
| Prior Year Adjustments                         | 128,402                      | 146,167                    | 17,765           |
| Subtotal - Other Revenue                       | 384,740                      | 417,812                    | 33,072           |
| Subtotal-Current Resources                     | 39,468,131                   | 40,032,252                 | 564,121          |
| <b>Total Resources Available</b>               | <b>41,180,046</b>            | <b>41,744,167</b>          | <b>564,121</b>   |
| <b><u>Actual &amp; Estimated Spending</u></b>  |                              |                            |                  |
| K-12 Education                                 | 15,805,822                   | 15,805,683                 | (139)            |
| K-12 Ptx Rec Shift/Aid Payment Shift           | 812,574                      | 812,574                    | 0                |
| K-12 Education                                 | 16,618,396                   | 16,618,257                 | (139)            |
| Higher Education                               | 2,834,388                    | 2,833,660                  | (728)            |
| Property Tax Aids & Credits                    | 2,955,869                    | 2,933,178                  | (22,691)         |
| Health & Human Services                        | 11,648,542                   | 11,620,932                 | (27,610)         |
| Public Safety & Judiciary                      | 1,980,534                    | 1,978,618                  | (1,916)          |
| Transportation                                 | 274,720                      | 270,390                    | (4,330)          |
| Environment & Agriculture                      | 388,265                      | 394,932                    | 6,667            |
| Jobs, Economic Development, Housing & Commerce | 432,644                      | 395,916                    | (36,728)         |
| State Government & Veterans                    | 976,919                      | 930,045                    | (46,874)         |
| Debt Service                                   | 1,242,995                    | 1,243,532                  | 537              |
| Capital Projects & Grants                      | 411,273                      | 410,674                    | (599)            |
| Deficiencies/Other                             | 9,280                        | 11,016                     | 1,736            |
| Estimated Cancellations                        | (15,000)                     | 0                          | 15,000           |
| <b>Subtotal Expenditures &amp; Transfers</b>   | <b>39,758,825</b>            | <b>39,641,150</b>          | <b>(117,675)</b> |
| Dedicated Expenditures                         | 0                            | 0                          | 0                |
| <b>Total Expenditures &amp; Transfers</b>      | <b>39,758,825</b>            | <b>39,641,150</b>          | <b>(117,675)</b> |
| <b>Balance Before Reserves</b>                 | <b>1,421,221</b>             | <b>2,103,017</b>           | <b>681,796</b>   |
| Cash Flow Account                              | 350,000                      | 350,000                    | 0                |
| Budget Reserve                                 | 994,339                      | 994,339                    | 0                |
| Stadium Reserve                                | 29,977                       | 32,634                     | 2,657            |
| Appropriations Carried Forward                 | 0                            | 94,137                     | 94,137           |
| <b>Budgetary Balance</b>                       | <b>46,905</b>                | <b>631,907</b>             | <b>585,002</b>   |

**Closed Biennium: FY 2014-15 General Fund Budget**  
**November 2015 Forecast By Fiscal Year**  
(\$ in thousands)

|  | Actual<br>FY 2014 | Actual<br>FY 2015 | Biennial Total<br>FY 2014-15 |
|--|-------------------|-------------------|------------------------------|
| <b><u>Actual &amp; Estimated Resources</u></b> |                   |                   |                              |
| Balance Forward From Prior Year                | 1,711,915         | 1,885,866         | 1,711,915                    |
| Current Resources:                             |                   |                   |                              |
| Tax Revenues                                   | 18,553,847        | 19,586,656        | 38,140,503                   |
| Non-Tax Revenues                               | 721,298           | 752,639           | 1,473,937                    |
| Subtotal - Non-Dedicated Revenue               | 19,275,145        | 20,339,294        | 39,614,439                   |
| Dedicated Revenue                              | 505               | 786               | 1,291                        |
| Transfers In                                   | 187,906           | 82,448            | 270,354                      |
| Prior Year Adjustments                         | 58,702            | 87,465            | 146,167                      |
| Subtotal - Other Revenue                       | 247,113           | 170,699           | 417,812                      |
| Subtotal-Current Resources                     | 19,522,258        | 20,509,994        | 40,032,252                   |
| <b>Total Resources Available</b>               | <b>21,234,173</b> | <b>22,395,860</b> | <b>41,744,167</b>            |
| <b><u>Actual &amp; Estimated Spending</u></b>  |                   |                   |                              |
| K-12 Education                                 | 7,617,396         | 8,188,287         | 15,805,683                   |
| K-12 Ptx Rec Shift/Aid Payment Shift           | 812,574           | 0                 | 812,574                      |
| K-12 Education                                 | 8,429,970         | 8,188,287         | 16,618,257                   |
| Higher Education                               | 1,381,461         | 1,452,199         | 2,833,660                    |
| Property Tax Aids & Credits                    | 1,320,534         | 1,612,644         | 2,933,178                    |
| Health & Human Services                        | 5,429,890         | 6,191,042         | 11,620,932                   |
| Public Safety & Judiciary                      | 943,905           | 1,034,713         | 1,978,618                    |
| Transportation                                 | 148,201           | 122,189           | 270,390                      |
| Environment & Agriculture                      | 153,782           | 241,150           | 394,932                      |
| Jobs, Economic Development, Housing & Commerce | 191,814           | 204,102           | 395,916                      |
| State Government & Veterans                    | 437,347           | 492,698           | 930,045                      |
| Debt Service                                   | 619,935           | 623,597           | 1,243,532                    |
| Capital Projects & Grants                      | 281,913           | 128,761           | 410,674                      |
| Deficiencies/Other                             | 9,555             | 1,461             | 11,016                       |
| <b>Total Expenditures &amp; Transfers</b>      | <b>19,348,307</b> | <b>20,292,843</b> | <b>39,641,150</b>            |
| <b>Balance Before Reserves</b>                 | <b>1,885,866</b>  | <b>2,103,017</b>  | <b>2,103,017</b>             |
| Cash Flow Account                              | 350,000           | 350,000           | 350,000                      |
| Budget Reserve                                 | 660,992           | 994,339           | 994,339                      |
| Stadium Reserve                                | 39,780            | 32,634            | 32,634                       |
| Appropriations Carried Forward                 | 178,751           | 94,137            | 94,137                       |
| <b>Budgetary Balance</b>                       | <b>656,343</b>    | <b>631,907</b>    | <b>631,907</b>               |



**Current Biennium: FY 2016-17 General Fund Budget**  
**End-of-Session vs. November 2015 Forecast Comparison**  
(\$ in thousands)

|  | <b>5-15 Enacted<br/>FY 2016-17</b> | <b>11-15 Fcst<br/>FY 2016-17</b> | <b>\$<br/>Change</b> |
|--|------------------------------------|----------------------------------|----------------------|
| <b><u>Actual &amp; Estimated Resources</u></b> |                                    |                                  |                      |
| Balance Forward From Prior Year                | 1,421,221                          | 2,103,017                        | 681,796              |
| Current Resources:                             |                                    |                                  |                      |
| Tax Revenues                                   | 40,802,662                         | 40,904,793                       | 102,131              |
| Non-Tax Revenues                               | 1,425,825                          | 1,425,648                        | (177)                |
| Subtotal - Non-Dedicated Revenue               | 42,228,487                         | 42,330,441                       | 101,954              |
| Dedicated Revenue                              | 1,000                              | 1,000                            | 0                    |
| Transfers In                                   | 329,338                            | 316,942                          | (12,396)             |
| Prior Year Adjustments                         | 70,000                             | 70,000                           | 0                    |
| Subtotal - Other Revenue                       | 400,338                            | 387,942                          | (12,396)             |
| Subtotal-Current Resources                     | 42,628,825                         | 42,718,383                       | 89,558               |
| <b>Total Resources Available</b>               | <b>44,050,046</b>                  | <b>44,821,400</b>                | <b>771,354</b>       |
| <b><u>Actual &amp; Estimated Spending</u></b>  |                                    |                                  |                      |
| Higher Education                               | 3,066,924                          | 3,066,924                        | 0                    |
| K-12 Education                                 | 17,236,186                         | 17,309,230                       | 73,044               |
| Property Tax Aids & Credits                    | 3,352,501                          | 3,358,228                        | 5,727                |
| Health & Human Services                        | 12,480,644                         | 12,064,178                       | (416,466)            |
| Public Safety & Judiciary                      | 2,121,924                          | 2,145,944                        | 24,020               |
| Transportation                                 | 275,139                            | 277,639                          | 2,500                |
| Environment & Agriculture                      | 376,570                            | 461,052                          | 84,482               |
| Jobs, Economic Development, Housing & Commerce | 402,079                            | 439,610                          | 37,531               |
| State Government & Veterans                    | 987,073                            | 1,026,629                        | 39,556               |
| Debt Service                                   | 1,267,459                          | 1,240,853                        | (26,606)             |
| Capital Projects & Grants                      | 287,232                            | 285,318                          | (1,914)              |
| Estimated Cancellations                        | (20,000)                           | (20,000)                         | 0                    |
| <b>Total Expenditures &amp; Transfers</b>      | <b>41,833,731</b>                  | <b>41,655,604</b>                | <b>(178,127)</b>     |
| <b>Balance Before Reserves</b>                 | <b>2,216,315</b>                   | <b>3,165,795</b>                 | <b>949,481</b>       |
| Cash Flow Account                              | 350,000                            | 350,000                          | 0                    |
| Budget Reserve                                 | 994,339                            | 1,596,522                        | 602,183              |
| Stadium Reserve                                | 6,840                              | 13,130                           | 6,290                |
| <b>Budgetary Balance</b>                       | <b>865,136</b>                     | <b>1,206,143</b>                 | <b>341,008</b>       |

**Current Biennium: FY 2016-17 General Fund Budget**  
**November 2015 Forecast By Fiscal Year**  
(\$ in thousands)

|  | 11-15 Fcst<br>FY 2016 | 11-15 Fcst<br>FY 2017 | Biennial Total<br>FY 2016-17 |
|--|-----------------------|-----------------------|------------------------------|
| <b><u>Actual &amp; Estimated Resources</u></b> |                       |                       |                              |
| Balance Forward From Prior Year                | 2,103,017             | 2,546,053             | 2,103,017                    |
| Current Resources:                             |                       |                       |                              |
| Tax Revenues                                   | 20,006,320            | 20,898,473            | 40,904,793                   |
| Non-Tax Revenues                               | 724,341               | 701,307               | 1,425,648                    |
| Subtotal - Non-Dedicated Revenue               | 20,730,661            | 21,599,780            | 42,330,441                   |
| Dedicated Revenue                              | 500                   | 500                   | 1,000                        |
| Transfers In                                   | 186,417               | 130,525               | 316,942                      |
| Prior Year Adjustments                         | 35,000                | 35,000                | 70,000                       |
| Subtotal - Other Revenue                       | 221,917               | 166,025               | 387,942                      |
| Subtotal-Current Resources                     | 20,952,578            | 21,765,805            | 42,718,383                   |
| <b>Total Resources Available</b>               | <b>23,055,595</b>     | <b>24,311,858</b>     | <b>44,821,400</b>            |
| <b><u>Actual &amp; Estimated Spending</u></b>  |                       |                       |                              |
| Higher Education                               | 1,530,668             | 1,536,256             | 3,066,924                    |
| K-12 Education                                 | 8,508,559             | 8,800,671             | 17,309,230                   |
| Property Tax Aids & Credits                    | 1,665,760             | 1,692,468             | 3,358,228                    |
| Health & Human Services                        | 5,781,640             | 6,282,538             | 12,064,178                   |
| Public Safety & Judiciary                      | 1,073,779             | 1,072,165             | 2,145,944                    |
| Transportation                                 | 141,847               | 135,792               | 277,639                      |
| Environment & Agriculture                      | 275,605               | 185,447               | 461,052                      |
| Jobs, Economic Development, Housing & Commerce | 251,444               | 188,166               | 439,610                      |
| State Government & Veterans                    | 528,176               | 498,453               | 1,026,629                    |
| Debt Service                                   | 609,235               | 631,618               | 1,240,853                    |
| Capital Projects & Grants                      | 147,829               | 137,489               | 285,318                      |
| Estimated Cancellations                        | (5,000)               | (15,000)              | (20,000)                     |
| <b>Total Expenditures &amp; Transfers</b>      | <b>20,509,541</b>     | <b>21,146,063</b>     | <b>41,655,604</b>            |
| <b>Balance Before Reserves</b>                 | <b>2,546,053</b>      | <b>3,165,795</b>      | <b>3,165,795</b>             |
| Cash Flow Account                              | 350,000               | 350,000               | 350,000                      |
| Budget Reserve                                 | 1,596,522             | 1,596,522             | 1,596,522                    |
| Stadium Reserve                                | 17,196                | 13,130                | 13,130                       |
| <b>Budgetary Balance</b>                       | <b>582,335</b>        | <b>1,206,143</b>      | <b>1,206,143</b>             |

**Biennial Comparison: FY 2014-15 vs. FY 2016-17 General Fund Budget**  
**November 2015 Forecast**  
(\$ in thousands)

|  | <b>Closed<br/>FY 2014-15</b> | <b>11-15 Fcst<br/>FY 2016-17</b> | <b>\$<br/>Difference</b> | <b>%<br/>Difference</b> |
|--|------------------------------|----------------------------------|--------------------------|-------------------------|
| <b>Actual &amp; Estimated Resources</b>        |                              |                                  |                          |                         |
| Balance Forward From Prior Year                | 1,711,915                    | 2,103,017                        | 391,102                  | 22.8%                   |
| Current Resources:                             |                              |                                  |                          |                         |
| Tax Revenues                                   | 38,140,503                   | 40,904,793                       | 2,764,290                | 7.2%                    |
| Non-Tax Revenues                               | 1,473,937                    | 1,425,648                        | (48,289)                 | -3.3%                   |
| Subtotal - Non-Dedicated Revenue               | 39,614,439                   | 42,330,441                       | 2,716,002                | 6.9%                    |
| Dedicated Revenue                              | 1,291                        | 1,000                            | (291)                    | -22.5%                  |
| Transfers In                                   | 270,354                      | 316,942                          | 46,588                   | 17.2%                   |
| Prior Year Adjustments                         | 146,167                      | 70,000                           | (76,167)                 | -52.1%                  |
| Subtotal - Other Revenue                       | 417,812                      | 387,942                          | (29,870)                 | -7.1%                   |
| Subtotal-Current Resources                     | 40,032,252                   | 42,718,383                       | 2,686,131                | 6.7%                    |
| <b>Total Resources Available</b>               | <b>41,744,167</b>            | <b>44,821,400</b>                | <b>3,077,233</b>         | <b>7.4%</b>             |
| <b>Actual &amp; Estimated Spending</b>         |                              |                                  |                          |                         |
| K-12 Education                                 | 15,805,683                   | 17,309,230                       | 1,503,547                | 9.5%                    |
| K-12 Ptx Rec Shift/Aid Payment Shift           | 812,574                      | 0                                | (812,574)                | -                       |
| K-12 Education                                 | 16,618,257                   | 17,309,230                       | 690,973                  | 4.2%                    |
| Higher Education                               | 2,833,660                    | 3,066,924                        | 233,264                  | 8.2%                    |
| Property Tax Aids & Credits                    | 2,933,178                    | 3,358,228                        | 425,050                  | 14.5%                   |
| Health & Human Services                        | 11,620,932                   | 12,064,178                       | 443,246                  | 3.8%                    |
| Public Safety & Judiciary                      | 1,978,618                    | 2,145,944                        | 167,326                  | 8.5%                    |
| Transportation                                 | 270,390                      | 277,639                          | 7,249                    | 2.7%                    |
| Environment & Agriculture                      | 394,932                      | 461,052                          | 66,120                   | 16.7%                   |
| Jobs, Economic Development, Housing & Commerce | 395,916                      | 439,610                          | 43,694                   | 11.0%                   |
| State Government & Veterans                    | 930,045                      | 1,026,629                        | 96,584                   | 10.4%                   |
| Debt Service                                   | 1,243,532                    | 1,240,853                        | (2,679)                  | -0.2%                   |
| Capital Projects & Grants                      | 410,674                      | 285,318                          | (125,356)                | -30.5%                  |
| Estimated Cancellations                        | 11,016                       | 0                                | (11,016)                 | -                       |
| <b>Total Expenditures &amp; Transfers</b>      | <b>0</b>                     | <b>(20,000)</b>                  | <b>(20,000)</b>          |                         |
| <b>Balance Before Reserves</b>                 | <b>39,641,150</b>            | <b>41,655,604</b>                | <b>2,014,454</b>         | <b>5.1%</b>             |
| Cash Flow Account                              | 350,000                      | 350,000                          | -                        |                         |
| Budget Reserve                                 | 994,339                      | 1,596,522                        | 602,183                  |                         |
| Stadium Reserve                                | 32,634                       | 13,130                           | (19,504)                 |                         |
| <b>Budgetary Balance</b>                       | <b>631,907</b>               | <b>1,206,143</b>                 | <b>574,237</b>           |                         |

**Planning Estimates: FY 2018-19 General Fund Budget**  
**End-of-Session vs. November 2015 Forecast Comparison**  
(\$ in thousands)

|  | <b>5-15 Enacted<br/>FY 2018-19</b> | <b>11-15 Fcst<br/>FY 2018-19</b> | <b>\$<br/>Change</b> |
|--|------------------------------------|----------------------------------|----------------------|
| <b><u>Actual &amp; Estimated Resources</u></b> |                                    |                                  |                      |
| Balance Forward From Prior Year                | 2,216,315                          | 3,165,795                        | 949,481              |
| Current Resources:                             |                                    |                                  |                      |
| Tax Revenues                                   | 44,695,248                         | 44,975,721                       | 280,473              |
| Non-Tax Revenues                               | 1,400,861                          | 1,391,710                        | (9,151)              |
| Subtotal - Non-Dedicated Revenue               | 46,096,109                         | 46,367,431                       | 271,322              |
| Dedicated Revenue                              | 1,000                              | 1,000                            | 0                    |
| Transfers In                                   | 124,930                            | 164,095                          | 39,165               |
| Prior Year Adjustments                         | 70,000                             | 70,000                           | 0                    |
| Subtotal - Other Revenue                       | 195,930                            | 235,095                          | 39,165               |
| Subtotal-Current Resources                     | 46,292,039                         | 46,602,526                       | 310,487              |
| <b>Total Resources Available</b>               | <b>48,508,354</b>                  | <b>49,768,321</b>                | <b>1,259,968</b>     |
| <b><u>Actual &amp; Estimated Spending</u></b>  |                                    |                                  |                      |
| Higher Education                               | 3,065,693                          | 3,065,693                        | 0                    |
| K-12 Education                                 | 18,003,307                         | 18,113,926                       | 110,619              |
| Property Tax Aids & Credits                    | 3,451,590                          | 3,445,553                        | (6,037)              |
| Health & Human Services                        | 14,828,153                         | 14,286,468                       | (541,685)            |
| Public Safety & Judiciary                      | 2,145,928                          | 2,152,801                        | 6,873                |
| Transportation                                 | 243,072                            | 243,072                          | 0                    |
| Environment & Agriculture                      | 381,770                            | 391,553                          | 9,783                |
| Jobs, Economic Development, Housing & Commerce | 392,150                            | 385,738                          | (6,412)              |
| State Government & Veterans                    | 1,016,395                          | 1,010,901                        | (5,494)              |
| Debt Service                                   | 1,207,103                          | 1,206,527                        | (576)                |
| Capital Projects & Grants                      | 278,887                            | 274,777                          | (4,110)              |
| Estimated Cancellations                        | (20,000)                           | (20,000)                         | 0                    |
| <b>Total Expenditures &amp; Transfers</b>      | <b>44,994,048</b>                  | <b>44,557,009</b>                | <b>(437,039)</b>     |
| <b>Balance Before Reserves</b>                 | <b>3,514,306</b>                   | <b>5,211,313</b>                 | <b>1,697,007</b>     |
| Cash Flow Account                              | 350,000                            | 350,000                          | 0                    |
| Budget Reserve                                 | 994,339                            | 1,596,522                        | 602,183              |
| Stadium Reserve                                | 0                                  | 11,710                           | 11,710               |
| <b>Budgetary Balance</b>                       | <b>2,169,967</b>                   | <b>3,253,081</b>                 | <b>1,083,114</b>     |

## Biennial Comparison: FY 2016-17 vs. FY 2018-19 General Fund Budget

## November 2015 Forecast

(\$ in thousands)

|  | 11-15 Fcst<br>FY 2016-17 | 11-15 Fcst<br>FY 2018-19 | \$<br>Change     | %<br>Change  |
|--|--------------------------|--------------------------|------------------|--------------|
| <b>Actual &amp; Estimated Resources</b>        |                          |                          |                  |              |
| Balance Forward From Prior Year                | 2,103,017                | 3,165,795                | 1,062,779        | 50.5%        |
| Current Resources:                             |                          |                          |                  |              |
| Tax Revenues                                   | 40,904,793               | 44,975,721               | 4,070,928        | 10.0%        |
| Non-Tax Revenues                               | 1,425,648                | 1,391,710                | (33,938)         | -2.4%        |
| Subtotal - Non-Dedicated Revenue               | 42,330,441               | 46,367,431               | 4,036,990        | 9.5%         |
| Dedicated Revenue                              | 1,000                    | 1,000                    | 0                | 0.0%         |
| Transfers In                                   | 316,942                  | 164,095                  | (152,847)        | -48.2%       |
| Prior Year Adjustments                         | 70,000                   | 70,000                   | 0                | 0.0%         |
| Subtotal - Other Revenue                       | 387,942                  | 235,095                  | (152,847)        | -39.4%       |
| Subtotal-Current Resources                     | 42,718,383               | 46,602,526               | 3,884,143        | 9.1%         |
| <b>Total Resources Available</b>               | <b>44,821,400</b>        | <b>49,768,321</b>        | <b>4,946,922</b> | <b>11.0%</b> |
| <b>Actual &amp; Estimated Spending</b>         |                          |                          |                  |              |
| K-12 Education                                 | 17,309,230               | 18,113,926               | 804,696          | 4.6%         |
| K-12 Education                                 | 17,309,230               | 18,113,926               | 804,696          | 4.6%         |
| Higher Education                               | 3,066,924                | 3,065,693                | (1,231)          | 0.0%         |
| Property Tax Aids & Credits                    | 3,358,228                | 3,445,553                | 87,325           | 2.6%         |
| Health & Human Services                        | 12,064,178               | 14,286,468               | 2,222,290        | 18.4%        |
| Public Safety & Judiciary                      | 2,145,944                | 2,152,801                | 6,857            | 0.3%         |
| Transportation                                 | 277,639                  | 243,072                  | (34,567)         | -12.5%       |
| Environment & Agriculture                      | 461,052                  | 391,553                  | (69,499)         | -15.1%       |
| Jobs, Economic Development, Housing & Commerce | 439,610                  | 385,738                  | (53,872)         | -12.3%       |
| State Government & Veterans                    | 1,026,629                | 1,010,901                | (15,728)         | -1.5%        |
| Debt Service                                   | 1,240,853                | 1,206,527                | (34,326)         | -2.8%        |
| Capital Projects & Grants                      | 285,318                  | 274,777                  | (10,541)         | -3.7%        |
| Estimated Cancellations                        | (20,000)                 | (20,000)                 | 0                | 0.0%         |
| <b>Total Expenditures &amp; Transfers</b>      | <b>41,655,604</b>        | <b>44,557,009</b>        | <b>2,901,404</b> | <b>7.0%</b>  |
| <b>Balance Before Reserves</b>                 | <b>3,165,795</b>         | <b>5,211,313</b>         | <b>2,045,517</b> | <b>64.6%</b> |
| Cash Flow Account                              | 350,000                  | 350,000                  | 0                |              |
| Budget Reserve                                 | 1,596,522                | 1,596,522                | 0                |              |
| Stadium Reserve                                | 13,130                   | 11,710                   | (1,420)          |              |
| <b>Budgetary Balance</b>                       | <b>1,206,143</b>         | <b>3,253,081</b>         | <b>2,046,937</b> |              |

## Biennial Comparison: FY2014-19 General Fund Planning Horizon

## November 2015 Forecast

(\$ in thousands)

|  | 11-15 Actuals<br>FY 2014-15 | 11-15 Fcst<br>FY 2016-17 | 11-15 Fcst<br>FY 2018-19 |
|--|-----------------------------|--------------------------|--------------------------|
| <b><u>Actual &amp; Estimated Resources</u></b> |                             |                          |                          |
| Balance Forward From Prior Year                | 1,711,915                   | 2,103,017                | 3,165,795                |
| Current Resources:                             |                             |                          |                          |
| Tax Revenues                                   | 38,140,503                  | 40,904,793               | 44,975,721               |
| Non-Tax Revenues                               | 1,473,937                   | 1,425,648                | 1,391,710                |
| Subtotal - Non-Dedicated Revenue               | 39,614,439                  | 42,330,441               | 46,367,431               |
| Dedicated Revenue                              | 1,291                       | 1,000                    | 1,000                    |
| Transfers In                                   | 270,354                     | 316,942                  | 164,095                  |
| Prior Year Adjustments                         | 146,167                     | 70,000                   | 70,000                   |
| Subtotal - Other Revenue                       | 417,812                     | 387,942                  | 235,095                  |
| Subtotal-Current Resources                     | 40,032,252                  | 42,718,383               | 46,602,526               |
| <b>Total Resources Available</b>               | <b>41,744,167</b>           | <b>44,821,400</b>        | <b>49,768,321</b>        |
| <b><u>Actual &amp; Estimated Spending</u></b>  |                             |                          |                          |
| K-12 Education                                 | 15,805,683                  | 17,309,230               | 18,113,926               |
| K-12 Ptx Rec Shift/Aid Payment Shift           | 812,574                     | 0                        | 0                        |
| K-12 Education                                 | 16,618,257                  | 17,309,230               | 18,113,926               |
| Higher Education                               | 2,833,660                   | 3,066,924                | 3,065,693                |
| Property Tax Aids & Credits                    | 2,933,178                   | 3,358,228                | 3,445,553                |
| Health & Human Services                        | 11,620,932                  | 12,064,178               | 14,286,468               |
| Public Safety & Judiciary                      | 1,978,618                   | 2,145,944                | 2,152,801                |
| Transportation                                 | 270,390                     | 277,639                  | 243,072                  |
| Environment & Agriculture                      | 394,932                     | 461,052                  | 391,553                  |
| Jobs, Economic Development, Housing & Commerce | 395,916                     | 439,610                  | 385,738                  |
| State Government & Veterans                    | 930,045                     | 1,026,629                | 1,010,901                |
| Debt Service                                   | 1,243,532                   | 1,240,853                | 1,206,527                |
| Capital Projects & Grants                      | 410,674                     | 285,318                  | 274,777                  |
| Deficiencies/Other                             | 11,016                      | 0                        | 0                        |
| Estimated Cancellations                        | 0                           | (20,000)                 | (20,000)                 |
| <b>Total Expenditures &amp; Transfers</b>      | <b>39,641,150</b>           | <b>41,655,604</b>        | <b>44,557,009</b>        |
| <b>Balance Before Reserves</b>                 | <b>2,103,017</b>            | <b>3,165,795</b>         | <b>5,211,313</b>         |
| Cash Flow Account                              | 350,000                     | 350,000                  | 350,000                  |
| Budget Reserve                                 | 994,339                     | 1,596,522                | 1,596,522                |
| Stadium Reserve                                | 32,634                      | 13,130                   | 11,710                   |
| <b>Budgetary Balance</b>                       | <b>631,907</b>              | <b>1,206,143</b>         | <b>3,253,081</b>         |

## Historical and Projected Revenue Growth

## November 2015 Forecast

(\$ in millions)

|                               | Actual<br>FY 2011 | Actual<br>FY 2012 | Actual<br>FY 2013 | Actual<br>FY 2014 | Actual FY<br>2015 | Estimated<br>FY 2016 | Estimated<br>FY 2017 | Estimated<br>FY 2018 | Estimated<br>FY 2019 | Average<br>Annual |
|-------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|----------------------|----------------------|----------------------|-------------------|
| <b>Individual Income Tax</b>  | \$7,529           | \$7,972           | \$9,013           | \$9,660           | \$10,403          | \$10,678             | \$11,278             | \$12,054             | \$12,679             |                   |
| \$ change                     |                   | 443               | 1,040             | 647               | 744               | 275                  | 600                  | 775                  | 625                  |                   |
| % change                      |                   | 5.9%              | 13.0%             | 7.2%              | 7.7%              | 2.6%                 | 5.6%                 | 6.9%                 | 5.2%                 | 7.0%              |
| <b>Sales Tax</b>              | 4,403             | \$4,669           | \$4,760           | \$5,043           | \$5,131           | \$5,368              | \$5,663              | \$5,944              | \$6,187              |                   |
| \$ change                     |                   | 266               | 91                | 282               | 89                | 236                  | 295                  | 281                  | 243                  |                   |
| % change                      |                   | 6.0%              | 2.0%              | 5.9%              | 1.8%              | 4.6%                 | 5.5%                 | 5.0%                 | 4.1%                 | 4.3%              |
| <b>Corporate Tax</b>          | 925               | \$1,044           | \$1,281           | \$1,278           | \$1,455           | \$1,340              | \$1,305              | \$1,317              | \$1,350              |                   |
| \$ change                     |                   | 119               | 237               | (3)               | 177               | (116)                | (35)                 | 12                   | 33                   |                   |
| % change                      |                   | 12.9%             | 22.7%             | -0.2%             | 13.9%             | -8.0%                | -2.6%                | 0.9%                 | 2.5%                 | 6.4%              |
| <b>Statewide Property Tax</b> | 767               | \$799             | \$811             | \$836             | \$838             | \$838                | \$851                | \$867                | \$889                |                   |
| \$ change                     |                   | 32                | 12                | 24                | 3                 | (0)                  | 14                   | 15                   | 22                   |                   |
| % change                      |                   | 4.2%              | 1.5%              | 3.0%              | 0.3%              | 0.0%                 | 1.6%                 | 1.8%                 | 2.6%                 | 1.8%              |
| <b>Other Tax Revenue</b>      | 1,231             | \$1,167           | \$1,282           | \$1,738           | \$1,758           | \$1,783              | \$1,801              | \$1,833              | \$1,857              |                   |
| \$ change                     |                   | (64)              | 115               | 456               | 20                | 25                   | 18                   | 32                   | 24                   |                   |
| % change                      |                   | -5.2%             | 9.9%              | 35.6%             | 1.2%              | 1.4%                 | 1.0%                 | 1.8%                 | 1.3%                 | 7.3%              |
| <b>Total Tax Revenue</b>      | \$14,855          | \$15,651          | \$17,147          | \$18,554          | \$19,587          | \$20,006             | \$20,898             | \$22,014             | \$22,961             |                   |
| \$ change                     |                   | 796               | 1,496             | 1,407             | 1,033             | 420                  | 892                  | 1,116                | 947                  |                   |
| % change                      |                   | 5.4%              | 9.6%              | 8.2%              | 5.6%              | 2.1%                 | 4.5%                 | 5.3%                 | 4.3%                 | 5.9%              |
| <b>Non-Tax Revenues</b>       | 808               | \$774             | \$798             | \$1,288           | \$753             | \$724                | \$701                | \$698                | \$693                |                   |
| \$ change                     |                   | (34)              | 24                | 489               | (535)             | (28)                 | (23)                 | (3)                  | (5)                  |                   |
| % change                      |                   | -4.2%             | 3.1%              | 61.3%             | -41.6%            | -3.8%                | -3.2%                | -0.4%                | -0.7%                | 2.0%              |
| <b>Transfers, All Other</b>   | 521               | \$486             | \$602             | \$188             | \$82              | \$186                | \$131                | \$82                 | \$82                 |                   |
| \$ change                     |                   | (35)              | 116               | (414)             | (105)             | 104                  | (56)                 | (48)                 | 0                    |                   |
| % change                      |                   | -6.8%             | 23.9%             | -68.8%            | -56.1%            | 126.1%               | -30.0%               | -37.1%               | 0.0%                 | -1.9%             |
| <b>Total Revenue</b>          | \$16,184          | \$16,912          | \$18,547          | \$20,030          | \$20,422          | \$20,917             | \$21,730             | \$22,795             | \$23,737             |                   |
| \$ change                     |                   | 728               | 1,636             | 1,483             | 392               | 495                  | 813                  | 1,064                | 942                  |                   |
| % change                      |                   | 4.5%              | 9.7%              | 8.0%              | 2.0%              | 2.4%                 | 3.9%                 | 4.9%                 | 4.1%                 | 5.1%              |

## Historical and Projected Expenditure Growth

## November 2015 Forecast

(\$ in millions)

|                                     | Actual<br>FY 2011 | Actual<br>FY 2012 | Actual<br>FY 2013 | Actual<br>FY 2014 | Actual<br>FY 2015 | Estimated<br>FY 2016 | Estimated<br>FY 2017 | Estimated<br>FY 2018 | Estimated<br>FY 2019 | Annual |
|-------------------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|----------------------|----------------------|----------------------|--------|
| <b>K-12 Education</b>               | \$6,078           | \$6,616           | \$8,865           | \$8,430           | \$8,188           | \$8,509              | \$8,801              | \$8,976              | \$9,138              |        |
| \$ change                           |                   | 538               | 2,249             | (435)             | (242)             | 320                  | 292                  | 175                  | 162                  |        |
| % change                            |                   | 8.9%              | 34.0%             | -4.9%             | -2.9%             | 3.9%                 | 3.4%                 | 2.0%                 | 1.8%                 | 7.1%   |
| <b>Higher Education</b>             | 1,357             | \$1,275           | \$1,295           | \$1,381           | \$1,452           | \$1,531              | \$1,536              | \$1,535              | \$1,531              |        |
| \$ change                           |                   | (82)              | 20                | 86                | 71                | 78                   | 6                    | (2)                  | (3)                  |        |
| % change                            |                   | -6.0%             | 1.5%              | 6.7%              | 5.1%              | 5.4%                 | 0.4%                 | -0.1%                | -0.2%                | 2.2%   |
| <b>Prop. Tax Aids &amp; Credits</b> | 1,401             | \$1,457           | \$1,320           | \$1,321           | \$1,613           | \$1,666              | \$1,692              | \$1,717              | \$1,728              |        |
| \$ change                           |                   | 56                | (137)             | 0                 | 292               | 53                   | 27                   | 25                   | 11                   |        |
| % change                            |                   | 4.0%              | -9.4%             | 0.0%              | 22.1%             | 3.3%                 | 1.6%                 | 1.5%                 | 0.6%                 | 3.6%   |
| <b>Health &amp; Human Services</b>  | 4,323             | \$5,385           | \$5,208           | \$5,430           | \$6,191           | \$5,782              | \$6,283              | \$7,009              | \$7,277              |        |
| \$ change                           |                   | 1,062             | (178)             | 222               | 761               | (409)                | 501                  | 726                  | 268                  |        |
| % change                            |                   | 24.6%             | -3.3%             | 4.3%              | 14.0%             | -6.6%                | 8.7%                 | 11.6%                | 3.8%                 | 6.9%   |
| <b>Public Safety</b>                | 946               | \$883             | \$958             | \$944             | \$1,035           | \$1,074              | \$1,072              | \$1,075              | \$1,078              |        |
| \$ change                           |                   | (63)              | 75                | (14)              | 91                | 39                   | (2)                  | 3                    | 3                    |        |
| % change                            |                   | -6.7%             | 8.5%              | -1.4%             | 9.6%              | 3.8%                 | -0.2%                | 0.3%                 | 0.2%                 | 2.3%   |
| <b>Debt Service</b>                 | 401               | \$192             | \$223             | \$620             | \$624             | \$609                | \$632                | \$587                | \$619                |        |
| \$ change                           |                   | (209)             | 31                | 397               | 4                 | (14)                 | 22                   | (44)                 | 32                   |        |
| % change                            |                   | -52.1%            | 16.1%             | 178.0%            | 0.6%              | -2.3%                | 3.7%                 | -7.0%                | 5.4%                 | 24.0%  |
| <b>All Other</b>                    | 829               | \$772             | \$871             | \$1,223           | \$1,190           | \$1,340              | \$1,130              | \$1,144              | \$1,142              |        |
| \$ change                           |                   | (57)              | 99                | 352               | (32)              | 150                  | (210)                | 13                   | (1)                  |        |
| % change                            |                   | -6.9%             | 12.8%             | 40.4%             | -2.6%             | 12.6%                | -15.6%               | 1.2%                 | -0.1%                | 6.8%   |
| <b>Total Spending</b>               | \$15,335          | \$16,580          | \$18,739          | \$19,348          | \$20,293          | \$20,510             | \$21,146             | \$22,043             | \$22,514             |        |
| \$ change                           |                   | 1,245             | 2,160             | 609               | 945               | 217                  | 637                  | 897                  | 470                  |        |
| % change                            |                   | 8.1%              | 13.0%             | 3.3%              | 4.9%              | 1.1%                 | 3.1%                 | 4.2%                 | 2.1%                 | 5.6%   |